SEQUENCE LISTING

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<120> Compositions and Methods Relating to Prostate Specific Genes and Proteins

<130> DEX-0259

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<150> 60/244,782
<151> 2000-11-01

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<170> PatentIn Ver. 2.1

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<211> 74
<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 391
<212> DNA
<213> Homo sapiens

<400> 22

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<212> DNA
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<211> 123
<212> DNA
<213> Homo sapiens

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<211> 505
<212> DNA
<213> Homo sapiens

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<211> 381
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 548
<212> DNA
<213> Homo sapiens

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<210> 29
<211> 584
<212> DNA
<213> Homo sapiens

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<211> 738
<212> DNA
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<211> 496
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (488)
<223> a, c, g or t

<220>
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<222> (492)
<223> a, c, g or t

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<210> 33
<211> 284
<212> DNA
<213> Homo sapiens

<400> 33
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<210> 34
<211> 429
<212> DNA
<213> Homo sapiens

<400> 34
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agcacaatct tcaattccta caaactagta atagagaaga ttatgagaaa caattagagg 360
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gtgcggtgg 429

<210> 35
<211> 612
<212> DNA
<213> Homo sapiens

<400> 35
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aattctgact acagggtatt ggtttaccac agaaccagag aagaatagca acacaaatcc 480
tatacgatat cttacggtga tatctataga ccccaaaatg gttaggaggc aagtacaaaa 540
ggctctgaaa ccccttacca atagccgata caatgtaact aaaactacta aatactctta 600
taatattctg ga 612

<210> 36
<211> 856
<212> DNA
<213> Homo sapiens

<400> 36
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aaagaagagc ttattttgac ttgcagacac atgttatcca ggtacctcaa gggaagtaca 180
aagttttgcc aacagagcga acaaaggtca gttcttaccc agtggctctc atccccggac 240
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ggagaggggc aggcatgggc aactgggtgc cccagccaca ttgctgacct ggcctggctg 780
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<210> 37
<211> 223
<212> DNA
<213> Homo sapiens

<400> 37
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cctggggtga gatttaaatt ggccttgtaa gctaataaaa aatgaagtct attctgaggg 120
caatgtggag tcattgaaag gttcccagga aggaaaataa aaatccaaaa tcatgttata 180
gaaaggtaac tcagccgggc accgtggctc atgcctgtgg tcc 223

<210> 38
<211> 256
<212> DNA
<213> Homo sapiens

<400> 38
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aaaaagtcat tcataatctt accactatta acattttgat gtatctatct gtatgtatgg 120
ctattctttt ttggtaaaac atgatcctag cctatctaat aatttaataa ttggatttta 180
aaaatttaac cattatatta tgggtaacct tacatgtcaa taaacaattc cacattgtca 240
tgctttaaat ggctgc 256

<210> 39
<211> 524
<212> DNA
<213> Homo sapiens

<400> 39
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ttcttcgctc catagcttta tcattggaga tctggttgat cctgacgtag cgctcaagaa 180
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ttgccgtctc ttccccagtt tcctttagag tttctgtgct gagcaaacct ccctgcgaag 420
ttaatcagat gctggacttc ttccctcaat cacaccagtt gcccagggag agagacactt 480
acaggacact cccttctgcc tattcaagta gtgccccttc tact 524

<210> 40
<211> 536
<212> DNA
<213> Homo sapiens

<400> 40
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taatgaagcc atttgccgtc tcttccccag tttcctttag agtttctgtg ctgagcaaac 420
ctccctgcga agttaatcag atgctggact tcttccctca atcacaccag ttgcccaggg 480
agagagacac ttacaggaca ctcccttctg cctattcaag tagtgcccct tctact 536

<210> 41
<211> 379
<212> DNA
<213> Homo sapiens

<400> 41
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cgtgtcagat gctggagatg tcatttgcat tgccagagtt tgccaagggt gcacacagaa 180
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acatcattaa cacgtgacaa agaagaacta tttaatgggc ccagatctat ttatgaagac 300
aatcaagtgg gagtttggag tggataaccc aaatttggat aactggtgaa taataaaatg 360
tatttatttc tgctggtgt 379

<210> 42
<211> 1215
<212> DNA
<213> Homo sapiens

<400> 42
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catgtactaa tgacagttat gcttttgcat tttcttgaat tttatgttta tttatctttc 240
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cattaacacg tgacaaagaa gaactattta atgggcccag atctatttat gaagacaatc 1140
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tatttctgct ggtgt 1215

<210> 43
<211> 754
<212> DNA
<213> Homo sapiens

<400> 43
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aagagacccc aaccgtcccc ttggcccccc gccccgccgt tttgcagttt gccaaccttc 180
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ccagggcctc ggatggcctc ggttgcccgt aagtacgcga aagaagaggt gaatccaatc 480
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cggaagatga aacttgcagt cttaggttgt cctcctttat atccatgttc caatcctctg 720
ggctttcctc gaaatgaata aaattgtgga aatg 754

<210> 44
<211> 955
<212> DNA
<213> Homo sapiens

<400> 44
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agwtcaatcg ctttacccta ggtagcctct tgttcagggc tcagggactc ctgtcttaag 180
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aatccaatcg ctggcctaga ggatagtgat cagacaaccc gaggattact aaacaagggg 720
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gcagcctttc ggaagatgaa acttgcagtc ttaggttgtc ctcctttata tccatgttcc 900
aatcctctgg gctttcctcg aaatgaataa aattgtggaa atgaaaaaaa aaaaa 955

<210> 45
<211> 503
<212> DNA
<213> Homo sapiens

<400> 45
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atcttgtcat ataatttaa aacagctggg atttagattg atactgcatt gaatttacct 120
atttatttgg gggagaatta tgccaaatga caatattgtg tcttgccatc taggaatatg 180
agattttccc attttttttcc agtctttttt atcaccttta gaaaagctat attgttttct 240
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gatttttggc atgctgatat atccagcaaa aaactttact gaactctaat gttttgtttc 420
tgagaggttt ctgatggtct gtttcttgca gggatgtctg aatcttccaa gtaaaaatgn 480
gtagactcct attttcctta gac 503

<210> 46
<211> 206
<212> DNA
<213> Homo sapiens

<400> 46
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ttttggcccc cttcccttta ttttaactca taactgatac ttaaaggtgc tctgccttat 120
taaatcagct cctaggctgc aagtgcataa tatttaaaaa tttgcaactt tgacttttta 180
aaaatctggt cttggtatgg agcaac 206

<210> 47
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (93)..(119)
<223> a, c, g or t

<400> 47
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cagatgactg acaactgtta acttctcact atgtgccagg gactattgtg agttaactca 180
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gacagagagg ttaattaaga gcaagtgttg gagttgaact cctgatattt ccccctttaa 300
gctgaagtcc atgacctgct tcccaattcc tggcagccac acagttgctc tgcnattttt 360
cagtcttcta actttcaaca tagttacttt ttac 394

<210> 48
<211> 135
<212> DNA
<213> Homo sapiens

<400> 48
gtcacataac atttccggtg gccattaggg tgagctttaa gatctaactg gccaaggggg 60
cttaagtaca atctttgatc agtaagtggc ttatgcctac ccagagacag cccctcagta 120
gccaggctgt gaaag 135

<210> 49
<211> 394
<212> DNA
<213> Homo sapiens

<400> 49
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gtactctgat ccaggagcac ctcctaggta gtcaggcttt aaaataaaat cacactcatc 120
cctgacagtc tggcagaata tgtgcatgcc caaggttata ccctctctgg actgagtgca 180
gtatgaagat ccaactatta gtcctggctg aatgggaagc caaaatataa actccttcag 240
ctttgatagc aatctgcaag tcacataaca tttccggtgg ccattagggt gagctttaag 300
atctaactgg ccaagggggc ttaagtacaa tctttgatca gtaagtggct tatgcctacc 360
cagagacagc ccctcagtag ccaggctgtg aaag 394

<210> 50
<211> 730
<212> DNA
<213> Homo sapiens

<400> 50
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acaggaacag tgcctatggg tttaattagt gcttagttgt tttgttttgc tccttcattt 120
ttggctgaga aattaatgat atttggaaat atctggagtt ccttttttctt gaaaaggtca 180
caaaccactg atttaaagag gatgactttg aaaatttagc tcacaatagt tgtgaaataa 240
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cttagctgag tgggggccac catgccttgc tcaaagcagg ttctccagtc agcaaacatc 600
agtcaaggca gaatctatag gcagtgccta ggaacacaga cgcatttcag atggtgagga 660
aaaagcaagt gaagcacaca atttgaatct tggaaatata ctttgaatcc atggggttta 720
gaagacacag 730

<210> 51
<211> 953
<212> DNA
<213> Homo sapiens

<400> 51
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<210> 52
<211> 527
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (224)..(365)
<223> a, c, g or t

<400> 52
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nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn 360
nnnnntcacc aatttacttt aacaatgcag agagaaagat ccattaacgt aagtgtttgg 420
atgagttgaa catgtgaaat atagattatt aaagtattga atgcatttta gatgtgggtt 480
atatatgggt tgtacttcat gaatattaag tctcccacag caaactg 527

<210> 53
<211> 406

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (308)
<223> a, c, g or t

<400> 53
agagaatgat ggcacacagt aatgcctctt tctttatttt tgcagaaagt ttcatgagag 60
ggtgagaaac agcaggtatc caatattctg aaggatggca ttctggggtt gcctaggtta 120
ctcagcagga tgcattatca cattatgcct catattcttt tggagtaagt aaaaatgggc 180
aagatgtgag acatggaagt taagccttct gataagaaac ttgcatcatc atcactataa 240
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agatgtgncc tgtctatgga actgtactag atgttgaagg aggtgtacct agaaatattc 360
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<210> 54
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (293)
<223> a, c, g or t

<220>
<221> unsure
<222> (304)
<223> a, c, g or t

<220>
<221> unsure
<222> (367)
<223> a, c, g or t

<400> 54
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acgtatcgcc taatacataa ttcttgtcat tagatgattt ttcctgtaaa ggngctaata 300
aggnatattc ctcggaattt attgtacatt atggattttg atatatactt agtaaaggtt 360
aagtaangga ct 372

<210> 55
<211> 537
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (214)..(326)
<223> a, c, g or t

<400> 55
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nnnnnnnnnn nnnnnnnnnn nnnnnntagc aacatttgaa tggtggccag tgtaatggag 360
agtgcagatc tagaagaaca aacacaactg gtaacagagt tacctggggg aaggttgagt 420
ttggggatgg agggctacag aaactttaga gttctgcaga acttttaaca tttttacaat 480
gagaatacat catatattat ctagctaatt taaaacaaat acattgttaa aatgaaa 537

<210> 56
<211> 847
<212> DNA
<213> Homo sapiens

<400> 56
caaaattaaa cttagacttt ttgaatttat tagctgtttt tgtgaagatt aattttagaa 60
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gcactaaaat cagttcaagg atgccaatcc ctaattggcc aaatagcctt accattcttg 180
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tgaaatgata aatttttatg atacagcata gaataatatg tatgtggaga cttgaaggag 300
tcaaatctca atgagccttt tgtagggctt aacgattgtt aaaaggggcc caaaagggca 360
ctaatttttg gaaagtgtat gtttgtttat ggtggtgaat gtgtagagag ggtgaaaagt 420
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aatgggaaga gagcgcaaga cgtgcagatt tagaaaaaag gttgagggaa acatattcaa 540
aagggaaaaa gaaagcaggg ggaaaataca ttagaggtgt tgaaattagt aggcactcac 600
agaggtgcta atcgagagtt ctgttgggct cctgtcatgc tgctattaaa gagcattagc 660
agctaagaga tctaaattct agtcctagtt ctttgtgttg ccgtggagaa gtcagttaac 720
ttacatgagg ctcaggttcc ttacctgtgt gtaaaatggg aacattgaac taggtgatct 780
ttaagatccc ttccgggtct aaaattgttt gacattatct tggtggtcag taactgtgag 840
aaacaca 847

<210> 57
<211> 1448
<212> DNA

<213> Homo sapiens

<220>
<221> unsure
<222> (1420)
<223> a, c, g or t

<400> 57
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gcactaaaat cagttcaagg atgccaatcc ctaattggcc aaatagcctt accattcttg 180
ttttcttctc caaatttgtt tttttgctgg tcagataact tccaatctct aaaatattcc 240
tgaaatgata aatttttatg atacagcata gaataatatg tatgtggaga cttgaaggag 300
tcaaatctca atgagccttt tgtagggctt aacgattgtt aaaagggggc caaaagggca 360
ctaatttttg gaaagtgtat gtttgtttat ggtggtgaat gtgtagagag ggtgaaaagt 420
aaaggaaaag tagaacaaga agaaagaaaa ctgataggta tgacgatgag agagaaagaa 480
aatgggaaga gagcgcaaga cgtgcagatt tagaaaaaag gttgagggaa acatattcaa 540
aagggaaaaa gaaagcaggg ggaaaataca ttagaggtgt tgaaattagt aggcactcac 600
agaggtgcta atcgagagtt ctgttgggct cctgtcatgc tgctattaaa gagcattagc 660
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ttaagatccc ttccggctct aaaattgttt gacattatct tggtggtcag taactgtgag 840
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atctgagtga aaagtatata catggaatat attagttata ttgaattaga ttgattggat 1380
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tttaagat 1448

<210> 58
<211> 354
<212> DNA
<213> Homo sapiens

<400> 58
acaaagatta ggacaagtat tccaggttct gacttacttc cttggagcct ctccttgaag 60
agctctgttt tctgaggacc gagtctaaaa actgaggccc tcagccactg gggacatgaa 120
atttcttgga aaggaaaaat taagtcttgg gttgactagc aaaacctgac cttttcaagc 180
tctagctcta acatcttctt gtctctgagt tgctgctgaa agacaaaaat atgagagttt 240
gggacccatt tctcactctc attctaatca agcagcagat attcattatt aatgaaatat 300
ataactatgt taatttaatt gatataggta ttgtttccag gatattcatt taaa 354

<210> 59
<211> 586
<212> DNA
<213> Homo sapiens

<400> 59
cactgcaaat gctactcgag gcagagagac ggaggaggtg gaatgtggcc tgtttccaca 60
ttgggccctt cggttttcca cagtgtcttt cactggcctt cttgaaatcc aggaaacaag 120
agagctggaa aatattggtc tctgagttat agcacagggc agagaagggc agaaaatgca 180
cctgaaagaa aacaggcaag tgacctatat accttctttt aggccttctc cctcttgtgt 240
accgcatagc atattaagtg taaaattatt ataacactca ttgtatcacg tggctgtgtt 300
ttgcttacat atccatctca acttttatct cttgctttcc ccagcaccag cactggcaca 360
ttgcaatttt tgaacaaaag atttttgaac taatgaataa ataggtgatt agatttaatt 420
caatttcaat gaatgtttat taggtcatta ttaggatatt gggtcagaat gttctagttg 480
attctacata catcacctcc ttcatagagt atcctgaaag gcccacaatt cactcgcaca 540
ttctttctcc taactgtcaa attttaccaa ttaaaaagta ttatca 586

<210> 60
<211> 610
<212> DNA
<213> Homo sapiens

<400> 60
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ggtggaatgt ggcctgtttc cacattgggc ccttcggttt tccacagtgt ctttcactgg 120
ccttcttgaa atccaggaaa caagagagct ggaaaatatt ggtctctgag ttatagcaca 180
gggcagagaa gggcagaaaa tgcacctgaa agaaaacagg caagtgacct atataccttc 240
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ttccccagca ccagcactgg cacattgcaa tttttgaaca aaagattttt gaactaatga 420
ataaataggt gattagattt aattcaattt caatgaatgt ttattaggtc attattagga 480
tattgggtca gaatgttcta gttgattcta catacatcac ctccttcata gagtatcctg 540
aaaggcccac aattcactcg cacattcttt ctcctaactg tcaaatttta ccaattaaaa 600
agtattatca 610

<210> 61
<211> 595
<212> DNA
<213> Homo sapiens

<400> 61
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atagtattct aactaatcaa ttaaaaagtg aaaataattt ttcagttctt attaaatgga 180
tggacattaa acatcagtag ctactaagat tgcaaagtca gtcaaacatt agctatggat 240

gttatagatg tcccaaagga atcagtcctg aatttgattc agtctcctgg atctagctgc 300
ctatgacagg aaataaagaa taacatgtng gattgcagca tgagtatgta atctgcaaaa 360
tccagactat gggaagcttg tcaggtcaaa gggcccaggt tctttaaagc agaacttgtc 420
aggaaatggg tggaggaagg accaatagat taagacattc aagaaatatc caatttttta 480
atggatgaga ctaaaaaact gtgttcaagg atgcacattt gagtgacaaa actctgaaaa 540
gacccaagga agtgattact attaaagtca aaacaacagt tggttatggt aggag 595

<210> 62
<211> 810
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (329)
<223> a, c, g or t

<220>
<221> unsure
<222> (691)..(752)
<223> a, c, g or t

<400> 62
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ttccttatat gaactatact actgaatagc caaatagatg aggggaagta tcttttttgta 120
atagtattct aactaatcaa ttaaaaagtg aaaataattt ttcagttctt attaaatgga 180
tggacattaa acatcagtag ctactaagat tgcaaagtca gtcaaacatt agctatggat 240
gttatagatg tcccaaagga atcagtcctg aatttgattc agtctcctgg atctagctgc 300
ctatgacagg aaataaagaa taacatgtng gattgcagca tgagtatgta atctgcaaaa 360
tccagactat gggaagcttg tcaggtcaaa gggcccaggt tctttaaagc agaacttgtc 420
aggaaatggg tggaggaagg accaatagat taagacattc aagaaatatc caatttttta 480
atggatgaga ctaaaaaact gtgttcaagg atgcacattt gagtgacaaa actctgaaaa 540
gacccaagga agtgattact attaaagtca aaacaacagt tggttatggt aggagggaaa 600
agtattgtat aggcatgggt agtatcgcac agttaaaata actcattaag ctaagtatat 660
ttgtatttgt ttgctgtatc tgttttattt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 720
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnggccgagg tgggctagat ctacctgtag 780
gtcaggtagt tcgagaccta gcctggccat 810

<210> 63
<211> 1215
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (778)

<223> a, c, g or t

<220>
<221> unsure
<222> (801)
<223> a, c, g or t

<400> 63
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tattgcagat agtttcacag gtcacagaac cttaaaaagg atttaaaggg catgtcttgt 120
gtagcatttg ttcctttgaa aatgatgctc ctttcccatt ttttagtaat tgaagaggat 180
agaaaggttt tctcattgct tacgtttcac tgaattctct gcagcccctt ttcccacaga 240
tgtttcagcc aaacctgtat ggagggaggt gacatggcat ggcttgctgt ttaaaacagt 300
tacggtattt tgtgcttccc ttttgagtgt gtccaagttg aacaaaagga gagcctctag 360
aacgcatggg aggggaaatt tgggaccagg acctttttaca tgctgggggga aactgacagg 420
actcagtgag gaaagacttt tgtttgtgtt ttcttctctc tctttctctg cagagcgcat 480
gatctatatc aacatgcttc ctggtcatac taaagaatct cagctagtgg tgatctacca 540
gtttctgtga ggattattac tgtattaatg cattttggga ggtgttcatt cagttcagag 600
tgaatgcttt ggaagacatt gcacagcttg aatcatgggg catcagggat agcttgactt 660
ttcctgaagg atgtatggtg gccatagact agttggttgg aagcttgcat tctgtaagcc 720
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agttatacta tgttt 1215

<210> 64
<211> 1841
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (774)..(797)
<223> a, c, g or t

<400> 64
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gtagcatttg ttcctttgaa aatgatgctc ctttcccatt ttttagtaat tgaagaggat 180
agaaaggttt tctcattgct tacgtttcac tgaattctct gcagcccctt ttcccacaga 240
tgtttcagcc aaacctgtat ggagggaggt gacatggcat ggcttgctgt ttaaaacagc 300
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acgcatggga gggaatttgg gacaggacct tttacatgct gggggaaact gacaggactc 420
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caggaatatt ccaagaatgt ggagtaacag gggacagcta g 1841

<210> 65
<211> 257
<212> DNA
<213> Homo sapiens

<400> 65
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taaaatagat gtaagggttt taaagtgagc aacaatctct aggagccaga tttttgagtt 120
ttctctccca aagctgcttt tcccctagtc ttctccatct tagtgaatgg caacttcact 180
cttccagatg ctcacaccaa acaccctgaa atcactcttg attctttctc ttatacccca 240
cattaaattc ctcagca 257

<210> 66
<211> 327
<212> DNA
<213> Homo sapiens

<400> 66
caggcagtga tgcgaggtga tctagaggat cccgataccc attatgtgcg tgatcatagg 60
catgagccac catgcctggc cttccacatg aaatttaaag tcagcttctc aatttctatt 120

gttttggttc taaaatagat gtaagggttt taaagtgagc aacaatctct aggagccaga 180
tttttgagtt ttctctccca aagctgcttt tcccctagtc ttctccatct tagtgaatgg 240
caacttcact cttccagatg ctcacaccaa acaccctgaa atcactcttg attctttctc 300
ttataccccа cattaaattc ctcagca 327

<210> 67
<211> 487
<212> DNA
<213> Homo sapiens

<400> 67
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cctgtctgga ggatgacttt ttgtctttta aagagagaag ctgtactact tctactgtac 120
cagaaattca tctgagagca ggttactttc tcattgtaaa gtccatgcaa gccagataaa 180
cctatagggt agcacttcct taattagttt acaatttctg aggataggtt ggtgggagta 240
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ttctagtgca ttttttttca gttatgtcct ttcccacaaa gcagtttggt gtaaccactg 360
taatcccagt aagctatggt tggggtctat gtataggaat gtgcaccctg aaattcattc 420
acttattcag cacaatttta tttgagcatc tactaagtgt tagggcactc tctgtggtca 480
gatatat 487

<210> 68
<211> 1006
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (317)..(479)
<223> a, c, g or t

<400> 68
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tatacattta actaagtaca aatataaatg tgcctaagag gtaagcttca aatggaattg 180
agggaaataa gcttcaaatt catttctcat atattcatca ttttatttgt tcatatgtta 240
tgtttttgtt gttgtgtatg ggagaggtac tgatttaggt tacttctttg tagtagagga 300
tggtagttaa aaatacnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnna 480
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gttactttct cattgtaaag tccatgcaag ccagataaac ctatagggta gcacttcctt 720
aattagttta caatttctga ggataggttg gtgggagtaa actgcctctg agtgttcact 780
tctctgggaa ctgtcccgtc tgttgttgtg tatcatatgt tctagtgcat ttttttcag 840

ttatgtcctt tcccacaaag cagtttggtg taaccactgt aatcccagta agctatggtt 900
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ttgagcatct actaagtgtt agggcactct ctgtggtcag atatat 1006

<210> 69
<211> 126
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (70)
<223> a, c, g or t

<400> 69
ccccttttact ttttataagt attgatagct ccctttttcat gcctgaggta ttaatctgag 60
tcttctcttn ttttttttctt ggtcagtcta gctaaacagt tgccaatttg ttgatctttt 120
ccaaga 126

<210> 70
<211> 448
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (364)
<223> a, c, g or t

<220>
<221> unsure
<222> (377)
<223> a, c, g or t

<400> 70
ttttttttttt ggaaaagatc aacaaattgg caactgttta gctagactga ccaagaaaaa 60
aaaaagagaa gactcagatt aatacctcag gcatggaaaa gggagcgaga ctctgtctca 120
aaacaacaac aacaaaaaga tacaagcaaa acaaatcaag aaacgtatac aaaggattat 180
acaccatgac caagtgggat ttatcccagg aatacaaggt tggtttaata tttgaaaatc 240
aatcgatgaa acacacaaaa ttgagagaat aaagatgaga agcttaatgt agggtaaaat 300
gtctgaagct ctaagtgaaa ctgttgataa gctgggggttt ctactcttgg aacgctagag 360
aggnagagac acttagntac ttagtaacag caaaaagccc ggccaaaaag tagaactcaa 420
gtgctttaga aactctgtgg gcaggggt 448

<210> 71

<211> 91
<212> DNA
<213> Homo sapiens

<400> 71
ttcggctcga gtaggaaatt aggaattaag taactgccct tcatactggt aatcttgata 60
tgttgaagga agtgacttgt tataagatag a 91

<210> 72
<211> 401
<212> DNA
<213> Homo sapiens

<400> 72
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ggcctgcaga cactcagcta aagatgtctc ataggttgtc cttgcagcta agtggggcca 120
tgagactagg ctttaaccag tgggctgaga gttaaagtga tttttgccat tctgttttta 180
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cctatctcat gtgtgattct acagtggggt ctatgtcccc tcttcttgaa tgtgtgtgca 300
cttgtgactg ctttgactaa cagagtatgg ggtaggatgc catgtgactt ctgaggctgg 360
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<210> 73
<211> 422
<212> DNA
<213> Homo sapiens

<400> 73
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aaaaacaaag agcttgcgat gggcctgcag acactcagct aaagatgtct cataggttgt 120
ccttgcagct aagtggggcc atgagactag gctttaacca gtgggctgag agttaaagtg 180
atttttgcca ttctgttttt aggaatggat gtgtctgcct gtggcagatt atatttttca 240
aagatgacca caaaaatatc tcctatctca tgtgtgattc tacagtgggg tctatgtccc 300
ctcttcttga atgtgtgtgc acttgtgact gctttgacta acagagtatg gggtaggatg 360
ccatgtgact tctgaggctg ggtcacggaa agcaattgtt ataagttaaa ttgcatgtcc 420
cc 422

<210> 74
<211> 471
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (392)

<223> a, c, g or t

<220>
<221> unsure
<222> (459)
<223> a, c, g or t

<400> 74
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cttctatttt aagtagaaat gcctatgtga tactcaaaaa ttcttatttt agttgtacat 120
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<210> 75
<211> 214
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<213> Homo sapiens

<400> 75
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acaccttgga gtttgttaag caggtcccct ctctgtagct tccaaagcca tgaagaaggg 180
gaaggaaggc caagacaggg gtagatagag gtgg 214

<210> 76
<211> 214
<212> DNA
<213> Homo sapiens

<400> 76
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ggccccggga gggcttccgg catcttgggg ttcccctcaa aggatggcct gggcaggact 180
tcttaaaaac aaacaggcgg ctgggcgcgg tggc 214

<210> 77
<211> 552
<212> DNA
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<220>

<221> unsure
<222> (273)..(357)
<223> a, c, g or t

<400> 77
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<210> 78
<211> 452
<212> DNA
<213> Homo sapiens

<400> 78
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<210> 79
<211> 747
<212> DNA
<213> Homo sapiens

<400> 79
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<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (102)..(217)
<223> a, c, g or t

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<210> 81
<211> 627
<212> DNA
<213> Homo sapiens

<400> 81
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<210> 82
<211> 476
<212> DNA
<213> Homo sapiens

<400> 82
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tcaacactga ggttactggg ttgaataatg gatatatgga catgtgtcct ccaaccccaa 420
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<210> 83
<211> 387
<212> DNA
<213> Homo sapiens

<400> 83
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<210> 84
<211> 4270
<212> DNA
<213> Homo sapiens

<400> 84
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<210> 85
<211> 468
<212> DNA
<213> Homo sapiens

<400> 85
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<210> 86
<211> 508
<212> DNA
<213> Homo sapiens

<400> 86
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cactgttgta ttgtcatatt ggcttcatta aaacaagaaa ttttattcat cagaagacct 480
cactaagaga cagagagact gaaaaagg 508

<210> 87
<211> 868
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (727)
<223> a, c, g or t

<400> 87
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cagaacgaaa tcaggctctg gaggccttgt gcaagccatg agcaaagagg cggtcagccc 240
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<210> 88
<211> 896
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (755)
<223> a, c, g or t

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<210> 89
<211> 229
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (113)
<223> a, c, g or t

<220>
<221> unsure
<222> (184)
<223> a, c, g or t

<220>
<221> unsure
<222> (202)
<223> a, c, g or t

<400> 89
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<210> 90
<211> 234
<212> DNA
<213> Homo sapiens

<400> 90
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<210> 91
<211> 326
<212> DNA
<213> Homo sapiens

<400> 91
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<210> 92
<211> 86
<212> DNA
<213> Homo sapiens

<400> 92
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acagctgctc agcaaaaccc gacttc 86

<210> 93
<211> 286
<212> DNA
<213> Homo sapiens

<400> 93
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gaaaaaaatt aagtgaacac atatattgac ccaaagttag acccattctg taacatgaaa 180
atacaaggca aaaatatata taatacaact atgttaaaag acccttttt ctatcttacc 240
taaaacttaa catctccaat gattatccat taataagctc ttttta 286

<210> 94
<211> 455
<212> DNA
<213> Homo sapiens

<400> 94
gataaaagta atgtattgat gtaaatttac tgcagttgat aactgtatca tggttgtgta 60
aagtattaat aatatcctca ttattgagaa atgcatattg aagtatttag aggtaaagaa 120
gagtaatgta tgaaattgaa atgattcaag aaaaatttgt gtatagaaag agcaaatgat 180
aaaacaagca ggattaaacg ttaactgtgt gtcagtctaa gaggaacctg gctatccttt 240
gtaattctat tgcagtcttt gtgtaaattt caggttactt ccaaatttag aaaaaaatta 300
agtgaacaca tatattgacc caaagttaga cccattctgt aacatgaaaa tacaaggcaa 360
aaatatatat aatacaacta tgttaaaaga ccctttttc tatcttacct aaaacttaac 420
atctccaatg attatccatt aataagctct tttta 455

<210> 95
<211> 158
<212> DNA
<213> Homo sapiens

<400> 95
ttttaaataa acttttttgtt tgattacaac atgcatagtg tacaagtcat aagggtgccg 60
cttgatgaaa tttcacagtg accccagctg tgtacccagc atccagatca acaagcggga 120
ttacaggcgt gggccactgc gcctggcaaa ttgagcac 158

<210> 96
<211> 262
<212> DNA
<213> Homo sapiens

<400> 96
gtttttctgt gatgtgtacc taggaatgga agtgctgagc tctgtgtata cggcccttcc 60
tcatggttct aactactaga gctttatagt aagtcttggt atgtggtaag acatgccctt 120
cctccctctt ttcaaagtgt ccccaaaagg ctatacctag gtctttattc ttccttaaga 180
atttttcaac tgcattagat gttgccacct tatcttccaa agctgttgtt gcagtttgtc 240
tttctcccag tgatatataa ga 262

<210> 97
<211> 87
<212> DNA
<213> Homo sapiens

<400> 97
atgagaaacg tacaaagaaa attttataat aagcgagttc agcaaggttg caagataaaa 60
gataagcata taaatagcag ttgtatt 87

<210> 98
<211> 230
<212> DNA
<213> Homo sapiens

<400> 98
gttcaggata aaagctttag ggctgattct ccctcatggc acacattcac tgggcatctg 60
ctctttggca ggccctgtta taggtctggg actgcaaagc taaggcctgg tagtgtgact 120
acccggaata atcaggaaag gcatcaccaa ggcagcagta gctgtgctgt gatcaaagaa 180
tgcacagggc ttgtagctac aggagagaga gaacagtggc aattccaggc 230

<210> 99
<211> 144

<212> DNA
<213> Homo sapiens

<400> 99
gccttcattt ctagtggagc attcccaggc caaattaggt gaagggtctc atttcctagg 60
atttcttcac aggtggcatc cgtcctcaga tgggctacct aggactaggg atggctgcag 120
gtttcaagga gcgagtagtt gaat 144

<210> 100
<211> 469
<212> DNA
<213> Homo sapiens

<400> 100
gactaccaca caaggttatg catgttgtgc gatgttcagc tgtaggtggg gcgatactca 60
aatcgtagcc taggctgcta gtctttacat gcacagtgtg gtttagatgt gtgcttaatt 120
ctcacagaag ccctacgggg caggcattcc cgttttacag atgtggaaac aaactatgag 180
ggtaagaatt tggccagggt ttcacagcta ggatatggag ttgctgggat ctgaccgcag 240
tcctgtttcc ttcctaatcc attggctgcc caccaggctg ccccacgggg tgtccctggg 300
cagtcgctta tctatactat ctacctttac atacgttgat tggctggctg aggtgagtac 360
actaggactt gactggaaaa ttttacaaac caagaaagca agggattctg ttcctcctac 420
ctcctagctt tctgtctcct agggaaagag aaanattaca aagaagaaa 469

<210> 101
<211> 200
<212> DNA
<213> Homo sapiens

<400> 101
gggatgaatg gcagacttta actggatgct ttatttaggc ttttcgaaag caaaaaaagt 60
ttatacattg ttacagctgg gtgttgggtt acaggctgtt tgttatattc atgtattagt 120
tcctgttatt ttaacatttt aaatatttca taattgaaaa aggaaaaatt agactgggac 180
cagtttatag aaagctttaa 200

<210> 102
<211> 461
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (145)..(170)
<223> a, c, g or t

<220>

<221> unsure
<222> (435)
<223> a, c, g or t

<220>
<221> unsure
<222> (444)
<223> a, c, g or t

<400> 102
gggagaaaat agtgttgtat gggagtaata tatttctatg tctctctggg atcaagctga 60
gatcaatatg tactgggatc aagtacatat tggaagctga ttctgtaaat taagatatac 120
atggtaagcc ctagagtaac ccctnnnnnn nnnnnnnnnn nnnnnnnnnn acctcaaaaa 180
acatagtgag ataaataatt taaattcttc attaggaaat atttacttaa tgcagaagaa 240
agcagtaagg gaggaataga agaacagaaa aatacatgag acacagtaaa ccaaaagtaa 300
aatgacagct ataaatccaa cttatatcaa acataacatt aaatgtgaat ggattaagga 360
atctgatcag aatgcagaga ttgtcagatg gattaaaata atncaataag gtccaactat 420
acactgtctg taggncacac atgntagacg tgatgtttat a 461

<210> 103
<211> 319
<212> DNA
<213> Homo sapiens

<400> 103
gcttgcctta aggaacatga caaggatctg ttgtaagatc cacttcctaa agtgcttaaa 60
gaaagaaatg gaaatctcaa gctaaggctc cgagtcactg tgagggagac tttccccctc 120
cagtctattc tgtagtaaca gaataaattt caaaataatt atttttccta attataaata 180
gaagtaatat cagctaattg tttaaagttt ggtaaatatt ttttaaatgt gaaaaaattc 240
ctctaatttc actcctaaaa ctcctttaac aatttgggta tctccagcct aggcaacaag 300
agtgaaactc tgccacaca 319

<210> 104
<211> 563
<212> DNA
<213> Homo sapiens

<400> 104
tattaattaa gtactcgcta agtgctaacc accataccaa atgttggaaa tgtagtaatg 60
agtaggacat gtgtatatgg tccatacctg aaaggaagtt attctagtag gagaggtgat 120
ctatcaacac ataattacaa catgtgatat gagctatgaa cacttatgaa caaacagggt 180
gctgtgtaaa agaataaagg aacaaagatc tgtgtatagg agtttttctgg aaaatgtttg 240
gattcggcag tcattttcaa aggcagaggg cattgatagc agtatcttaa catggaaaac 300
attaaaacta actagatatt agtattctat ttccaattca aaaataacca gaagatagtg 360
atgttgtttt gaatatagga tgtcaatctt tgtgttaatg tgttttgaaa aagcaagact 420
taattgaaaa tatacatcaa attataattt cagtgtatta aaaaactgcc tgtttaaata 480

tgtcctttct ttgctgtaaa ttttggttaa aatctattgg agttacgtcc ttgtggtgaa 540
gtacacccta cccccaagag agc 563

<210> 105
<211> 1041
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (140)..(229)
<223> a, c, g or t

<400> 105
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tctcagaaaa taaaacttga ataataatag aaaacaattt ttcatataaa aaattatact 120
taagtataaa aatgtatacn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnt gtgtatatgg 240
tccgtacctg aaaggaagtt attctagtag gagaggtgat ctatcaacac ataattacaa 300
catgtgatat gagctgtgaa cacttatgaa caaacagggt gctgtgtaaa agaataaagg 360
aacaaagatc tatgtatagg agttttctgg aaaatgtttg gattcggcag tcattttcaa 420
aggcagaggg cattgatagc agtatcttaa catggaaaac attaaaacta actagatatt 480
agtattctat ttccaattca aaaataacca gaagatagtg atgttgtttt gaatatagga 540
tgtcaatctt tgtgttaata atgtgttttg aaaaagcaag acttaattga aaatatacat 600
caaattataa tttcagtgta ttaaaaaact gcctgtttaa atatgtcctt tctttgctgt 660
aaatttggt taaaatctat tggagttatg tccttgtggt gaagtacacc ctacccccaa 720
gagagcaaat gatgaataaa tcagtagatg ttccatgaat gcaatgttgg ctgagctggc 780
cacagtggag tgtgatcacc tggttatagg agaatagcca gcaggttata tttcataatt 840
atatttttcc ttaaattttt gcattaatat ttaatagcaa taattaaatg aattccagac 900
tgaatagaca attttattca ttgaataaac attgagaatt gcctactgag gcctgggctc 960
taggaattcc accaagaata aaaaaagaca tggtgttttg ccctcaaatt gcttagaatc 1020
tattcaggcc acttagtagc a 1041

<210> 106
<211> 451
<212> DNA
<213> Homo sapiens

<400> 106
tggcaaatat gtttttaaaa tggagaggtg tgcaggaagt gagccagcaa ggaaggagaa 60
tataagtcgt ctttttttgca ggatgcaaaa ttgggtttat ttgcagactg atgtgttacc 120
ttctaaagga ctagccacaa cgtttgaccc tcaatctaag gtcaacactg ctatccattg 180
ctcacagacc agagtgcatc tcccatgagg caaaagagca ggtgtgagaa gtgggtaagc 240
agtctgtata ttgggggtgt ggtggatggc atagggata actcagtcta atgaaagaca 300
tcaatgtgcc attgggaaag gacagaggtt gccccctctt tccccagat agtcgcccag 360
cttataaatg catagatctg ggacagagaa taagggtcac ctaggttccc cctaatcaca 420

ggcgggacta ggacttttgg agatgtctca c 451

<210> 107
<211> 103
<212> DNA
<213> Homo sapiens

<400> 107
atcttgggcg gtctgaaatc tgagatactg tggaaagaac agaaagatcc tgtatctttc 60
ctataattgt tctactggaa gttgtcattt tacacaggag aca 103

<210> 108
<211> 979
<212> DNA
<213> Homo sapiens

<400> 108
agcggggggc ggcctgggac tcgggggcgg ggtcagtcat ataaggctgt gcccagcgct 60
tttggaagca gtaagtccag cccgaggcta aggaggtgtt aaccaccgaa gggggtaga 120
atgtttttcc ccaccagagg aggcagcgac cacgtctcct ctatggaggc attcaagagc 180
cgtccagctg aagcagcatc actgtctgag ctcggaaggc acaatccaca taggtctgca 240
tggtccacag agctgcatac ccacggggcc agcgggaggt gggcagctgc cgggctctct 300
tctgaagcag acaggatctc actctgttgc tgaggctgga tcacagctcc ctgcaacctt 360
gaactctccc tcaagcaatt ctccccactc tgccttccaa agcactagca ttataggcct 420
aagccaccac tcccatccac tgtagtgtaa actgtctcct tcaatgtttc caatagttgc 480
ggagcagatc agataagggt tcttcctgtc tgttgcttca agtttcattc tctctttaaa 540
caatacaagg ttggcttcca tggttccttc ttaaagaatg ttgaaggtgt gtcttcagat 600
tcatttagtg ttcgtggaac cccagggaaa gctgatgtaa aaacctcttt tttctcccat 660
atgtctcaaa aagttgtatt ttctgggtcc aagggatctg caagcctcct aaaggcattt 720
ccattgtcac taccaccagg tgtgaactgt aatctggcac gtatagttcc aagaactgtc 780
ataatagatg ctgaagaaac attgtgaagt taactcgctg ttaccaactg tgaagtcatt 840
agctagagga atcttgggcg gtctgaaatc tgagatactg tggaaagaac agaaagatcc 900
tgtatctttc ctataattgt tctactggaa gttgtcattt tacacaggag acattctgtt 960
ttatttattt tcttttgag 979

<210> 109
<211> 668
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (583)
<223> a, c, g or t

<400> 109
tatcagcctt taaggtttat tgtcccacaa tggctgtgga gttaaaaaaa aaaattcagt 60
gagtttggat ataagattat tatttaatga ataatcataa cataggaaaa catatcaaaa 120
catagggaaa accaacataa atagtcttca aaagacacta gttcttggta tattcacata 180
accacctttg tgaatgcagc acattaatac atctgtcata tagcacttta aaatggccaa 240
ctttttaagt gcttttatac tgtattctct ccacaatgat gtgactttcc aaaatttcc 300
actgaaaaag atgtaaccct gcaatgtggt ttagtatgga acttactttg cactgtatct 360
ggcggttgaa ttttgctttt attgtactgt ggacttgtga ctaaggcaaa taaaacttaa 420
gctcacttaa tttaaatatc tcaaaataac atttaggaaa aggtgcagtt tttctttgct 480
tcagaatggg tttttatcac aaaggaatga gtgagacatt tatttgtgct gggacttctg 540
cacagtcatt gaatgctgtg agtgaatgtt aagtgaaaat tcntggtcaa ggggaaaacc 600
aaggtttcct ttccagggat aattcctacc caaattacct acctggaaag gggaggaatg 660
gccgagcc 668

<210> 110
<211> 1112
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (17)
<223> a, c, g or t

<220>
<221> unsure
<222> (27)
<223> a, c, g or t

<220>
<221> unsure
<222> (59)
<223> a, c, g or t

<220>
<221> unsure
<222> (1027)
<223> a, c, g or t

<400> 110
aaaaatgcca ggccatngta ggggatncca gtcctatgcc ctttatgcct tcccagtcnc 60
aattaagacc ttgattgagc tgcagtacct ttaaaaagga ttagaagagc tattgaatga 120
cttaatttat tagaagtttt taagtgacag catttctaat tattcaagtg catttatttt 180
tcatgaaaaa aggtagaatg atttgttctg acataaagta aatagtgttg atgcattaga 240
aattgtgtgt cttgattatg atttctgtac tttttgcatt agaagtataa tggacttgta 300
tttttaaata gttgaaacta gcactgtgat catattaaat aatgcatttc tcagtttgga 360
cttcagatag ggattcattt gttgatattt tctttcttct ctcccctgct aacataaaca 420

cttttctgaa gcatatagtt atgatatcag cctttaaggt ttattgtccc acaatggctg 480
tggagttaaa aaaaaaaatt cagtgagttt ggatataaga ttattattta atgaataatc 540
ataacatagg aaaacatatc aaaacatagg gaaaaccaac ataaatagtc ttcaaaagac 600
actagttctt ggtatattca cataaccacc tttgtgaatg cagcacatta atacatctgt 660
catatagcac tttaaaatgg ccaacttttt aagtgctttt atactgtatt ctctccacaa 720
tgatgtgact ttccaaaatt ttccactgaa aaagatgtaa ccttgcaatg tggtttagta 780
tggaacttac tttgcactgt atctggcggt tgaattttgc ttttattgta ctgtggactt 840
gtgactaagg caaataaaac ttaagctcac ttaatttaaa tatctcaaaa taacatttag 900
gaaaaggtgc agttttttctt tgcttcagaa tgggttttta tcacaaagga atgagtgaga 960
catttatttg tgctgggact tctgcacagt cattgaatgc tgtgagtgaa tgttaagtga 1020
aaattcntgg tcaaggggaa aaccaaggtt tcctttccag ggataattcc tacccaaatt 1080
acctacctgg aaaggggagg aatggccgag cc 1112

<210> 111
<211> 1041
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (944)
<223> a, c, g or t

<220>
<221> unsure
<222> (946)
<223> a, c, g or t

<220>
<221> unsure
<222> (976)
<223> a, c, g or t

<400> 111
gtcatcgtgc agttgtgatt taatttacac tcaatcacag ttcttgaata aattcttgaa 60
taaattgcaa aaccttgaga attacattat ttttatcaag tgctatcata tgtactaggc 120
tttttgtgca atttgacttc agatgttaat aaaacaaatc agaaaaaact aaggtgtata 180
tttccaactg tggcttgctt catcatttgt gagactatgt catacatttc tacttttaga 240
cataacagaa gcagagagat tatatctcaa gctaatatga ggtttttaaa atcgtattat 300
atattcagcc tcagccagca tatcattttg gtggaggggt gggtacagat gattcaatat 360
tgtagtaatg tttgcttctg aatttttttt cttagttatt tgtctggtat gggatcatgt 420
agcttttttc tctttaactc gggtaattaa ggttcacaca gtaaagtcta tgcggtctaa 480
agctttaagg cggaggttgt tatctgttaa tgtgatggct ggtgccatca ggctctagac 540
gtttcttgtg tcatgtcctg ggtttccctc ctggagaagt ccagtgaaaa agcatagctt 600
ttggagttgg tcagacttgg gttacagcgc cacactgcca ctcactagct ggggggcttt 660
ggccaactac caaactctga tctccgtttc ctcacctata gagtggagat gataaaacta 720
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atcttaccgt tggtgggtcc catataattg acagctgttt ttctttctna gaggtatgtg 840
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taaagaattt ttataaggat taaaatgtat tattcaagtg cttntntttc actatggcat 960
ataaagaggc cagggnctgg aaaatgctca ggtgcatttc agttttgagc ttataaaact 1020
gggtagataa catgactagt g 1041

<210> 112
<211> 1380
<212> DNA
<213> Homo sapiens

<400> 112
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tggtcatgga attgcagatt gccccgccgc ccttgaaaat caagacatgg gcactgggat 120
atgttacagg tgtgggtcca cagagcacga aataaccaag tgtaaggcta aagtagaccc 180
ggctcttggc gaatttcctt ttgcaaaatg ttttgtttgt ggagaaatgg ggcacctgtc 240
tagatcttgt cctgataatc ccaaaggact ctatgctgat ggtaagtact gttaccctca 300
tatagcagaa atggtgagtc atcgtgcagt tgtgatttaa tttacactca atcacagttc 360
ttgaataaat tcttgaataa attgcaaaac cttgagaatt acattatttt tatcaagtgc 420
tatcatatgt actaggcttt ttgtgcaatt tgacttcaga tgttaataaa acaaatcaga 480
aaaaactaag gtgtatattt ccaactgtgc ttgcttcatc atttgtgaga ctatgtcata 540
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acagatgatt caatattgta gtaatgtttg cttctgaatt ttttttctta gttatttgtc 720
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gaattatggt atttgcctaa agaattttta taaggattaa aatgtattat tcaagtgctt 1260
ctctttcact atggcatata aagaggccag ggcctggaaa atgctcaggt gcatttcagt 1320
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<210> 113
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (163)
<223> a, c, g or t

<220>
<221> unsure
<222> (191)
<223> a, c, g or t

<220>
<221> unsure
<222> (198)
<223> a, c, g or t

<220>
<221> unsure
<222> (206)
<223> a, c, g or t

<400> 113
gcactgcagc cttaaacagg cacaattttg tctatacttc cagaacctag attattctga 60
aatctttaac aacataaggt ttagatacca tttgcattga gtacccacta ggtgccgact 120
cttttaaagt gcatttttag tttcattatc tcaactttgt aangttggca tcattattcc 180
cattttacag nagataanat tgaagnaaag tcaagtttag gggattttca aggttgtaca 240
gtacaactgg gtgacaaaat ttttgctctt tcaatgataa tgaggcctct gacatcttcc 300
tttctcataa gactacattt agtataactt atatatttta tcagtcaaca actatctttt 360
gagaacttgt acacccagga ctgtgtaatg ggc 393

<210> 114
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (95)..(291)
<223> a, c, g or t

<400> 114
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gaaaaggaga ttcattgtga atacatgata agtgnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
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aactaggttc gtcctgccca cgtgcagcaa gccaatcact atgatgatgg gttttgccaa 360
aagagacaag attttattca tagggctgct gaatgaggag acaggagagc aaatcccaaa 420
tctggcaccc tgaaaatagg 440

<210> 115
<211> 791

<212> DNA
<213> Homo sapiens

<400> 115
gaaatccaaa caactgccat tgatttattc atttatttca caaatattta ctgaacgcat 60
ccagcatgct ctgtgggtg ctgtgctggg gctgggggtg ccaggatgag aaacagccgt 120
gtggctgtgc tcttggcttc accagccaga cgagtgttgc ctttgcaagg agaaaggact 180
cacaaggctt acacatttgc tgccctcagt tttgcccttt ctcaaataaa tctcacacat 240
ccaatctcct tgttgcccat tagggagtat ataatgaaat taagtaaatg aggaattgcc 300
taaaactaag ggagtttcac ctccatgtag gtagaagaat gtgaaatggt ctgtgtccag 360
aagccagatc agaaatggtc catagcaagg tggggagggc agcgggtacc cacctggcag 420
tgtagggggt tggattcagc ttcatcttcc tgaccccttg tcaagtggac aagctccagc 480
caaacaaagg aagtgtgttg gagtggccac cagcacagaa gtgtactttt ctgggtaatg 540
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<210> 116
<211> 4351
<212> DNA
<213> Homo sapiens

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taaagaatat gcccaaaaca tctggaacgt ggaaccttca gatctaaaga tttctctatc 4320
caatgaatct aacaaagtca atggaaattg a 4351

<210> 117
<211> 454
<212> DNA
<213> Homo sapiens

<400> 117
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cttcaacctt cattaaggtt aactattcaa ccttcattaa aaacagaaag tgacaatttc 180
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agagttaaaa aaaagacgaa atgtaatatc tatgttattg caagtgaaag gaaaacagga 300
agataaatat cacaagaaga caaaaatgta tctaacattt tgggacaaga ttgtgggatc 360
cacagaaaat tggaacttgg aacttcctgt tccacagaga taaganatac cttgctttta 420
tctcacttct caaaaaagta agtgatgggg ttag 454

<210> 118
<211> 504
<212> DNA
<213> Homo sapiens

<400> 118
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cttcaacctt cattaaggtt aactattcaa ccttcattaa aaacagaaag tgacaatttc 180
acagcaaatt ctagaacttt agatcaaaag tcaactcaat atgggggatt tatataagaa 240
agagttaaaa aaaagacgaa atgtaatatc tatgttattg caagtgaaag gaaaacagga 300
agataaatat cacaagaaga caaaaatgta tctaacattt tgggacaaga ttgtgggatc 360
cacagaaaat tggaacttgg aacttcctgt tccacagaga taagaaatac acttgctttt 420
atctcacttc tcaaaaaaag taagatgaat ggggttttag gccccagaga cggacattgt 480
agctgcaatc aattgtacta tctg 504

<210> 119
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (385)
<223> a, c, g or t

<400> 119
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gaatatattt ataataacat tcgttatatt ctttatattc ataaaacatt ggaaacaatt 180
tttatggcca aaaatggatg aatagctcag taaatgacgg ttctctgcaa gcgatgtaat 240
agtatgcagt cagtaagcaa atacagaaga tactaagttg caacattaga atatataata 300
ttgtgtatta ggaagtcagg ttatcatatt taaattttga acaaaagtaa aggttagatc 360
agttcaattg agaaataggg gtcanttcag aaaatgttat tccatga 407

<210> 120
<211> 104
<212> DNA
<213> Homo sapiens

<400> 120
taaagaagtg ggtatcaggg actcctgtga gatagcatga gaaggtggta catttgggag 60
gtctcaaggg gttactgaat tattggaatt agaatcaaag ggac 104

<210> 121
<211> 149
<212> DNA
<213> Homo sapiens

<400> 121
tacagcaata gataattaat acttaattat ctaattaata catattaata ttttggcaac 60
atacactatg ttcctaaggt acctcggaaa atcctcagaa ccatgtgttg caaatggcaa 120
tgctgtggta caatggggtc tcctaggca 149

<210> 122
<211> 419
<212> DNA
<213> Homo sapiens

<400> 122
ggaaatgtgt ttagttgtca tataaaagga aaatgcagtt taaaataatt tcagtaattg 60
cattcttgag ttttctgtcc tccctggtac catgaaactg gagatctttg gagacctatc 120
acagaacatg tactggaatt gtttgtgtgt ggagtaaagg cagctgtttg tagccatcta 180
gttgggaact gtctttcctt ggatagttag ctactctgtt ggtgtgtggt gtaacactta 240
cctgttgctg gcacgtagtc agtgatttct gtcatgtata agtaggcctt gccattgtca 300
gcaggtaatg atcttggaaa gaccaacttc tgttaatgta atccacaatc tagtgagggg 360
attatagcta tcaaacatat ttctcagtcc acttttaag aagtagtcat ttaggctgg 419

<210> 123
<211> 691

<212> DNA
<213> Homo sapiens

<400> 123
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ccgcaacttc gaactcccgg gctcaagcaa tccttctgcc tcagcctccc aagagctggg 120
actacagaca tgtgctacca catccagctt ttttattttt tgtagaggta gggtctccct 180
atgttgccca ggtgggtctc acactccacc tcaagcaatc ctacagcttc agcctcccaa 240
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tggactgaga aatatgtttg atagctataa tcccctcact agattgtgga ttacattaac 360
agaagttggt ctttccaaga tcattacctg ctgacaatgg caaggcctac ttatacatga 420
cagaaatcac tgactacgtg ccagcaacag gtaagtgtta caccacacac caacagagta 480
gctaactatc caaggaaaga cagttcccaa ctagatggct acaaacagct gcctttactc 540
cacacacaaa caattccagt acatgttctg tgataggtct ccaaagatct ccagtttcat 600
ggtaccaggg aggacagaaa actcaagaat gcaattactg aaattatttt aaactgcatt 660
ttccttttat atgacaacta aacacatttc c 691

<210> 124
<211> 476
<212> DNA
<213> Homo sapiens

<400> 124
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gctagatatc tagggaagtg aaggaaggac ggcaagggag gcagagatga ataaggcagt 120
gactaggccc catgggaggg agatcgcggt accacagctg aatggattgt ctcccctaca 180
ttgccattca gctaagagac attcagcaat ttattgaata agcacttctt gagcccctag 240
tgcatgcatc agacactgcg ttagggctgg gtgcacagca gtgaataaga cagacgtagt 300
tcttgctctc gagtgctcat ggtccaatga gggagacaga gggtgactgg gaacaacagt 360
ccagtgtgat aatgctagca tagcagcaga acaggggctg cacaaacaca aagaaggaac 420
atctaactcc caaatgaaaa gaggggcatt gacaaagtcc tcctagggaa aaagaa 476

<210> 125
<211> 491
<212> DNA
<213> Homo sapiens

<400> 125
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acttgttatt ctgtgtgcta gatatctagg gaagtgaagg aaggacggca agggaggcag 120
agatgaataa ggcagtgact aggccccatg ggagggagat cgcggtacca cagctgaatg 180
gattgtctcc cctacattgc cattcagcta agagacattc agcaatttat tgaataagca 240
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ataagacaga cgtagttctt gctctcgagt gctcatggtc caatgaggga gacagagggt 360
gactgggaac aacagtccag tgtgataatg ctagcatagc agcagaacag gggctgcaca 420
aacacaaaga aggaacatct aactcccaaa tgaaaagagg ggcattgaca aagtcctcct 480

agggaaaaag a

<210> 126
<211> 752
<212> DNA
<213> Homo sapiens

<400> 126
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atcccttctc cgcaataaaa tcttggattc tgggtgtgtt tgttttagat gctgtggtac 120
cggctggttt tagcaacaag gacagtgttg gtagggtgag aaacactatc ccaagtcata 180
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gtgcaccaca tcgagaagag attggtcacc gcagcacagg gcacgcagaa ttccattagt 600
atcacttacc tgggaagtcc aggtgccttc aatagttgag gggagtaaat gatatgacta 660
cctaccttca aaacttgtag tttaaagtgg taacttgaat actcacattt acctctgttt 720
ccttcctcta aaagaatggt tttttaaagg gt 752

<210> 127
<211> 158
<212> DNA
<213> Homo sapiens

<400> 127
aaaaaaaaaa aaaaagacag ttgggttgtc atatctcttc tgcctttaat ttgttgaggt 60
acctcatgtg tagcctttgg aatactcttc tgtatactgg tgagagaatt agagtgaaaa 120
aagcagataa catcttagtg ttattaatga aagtagta 158

<210> 128
<211> 642
<212> DNA
<213> Homo sapiens

<400> 128
tttatttgtt tttccagctt tactgcaggt atgattgaca aataatgtct gtttgtaaaa 60
tttcagtcga gtcatagata ccaggtaagg cagagagtgg gagggagact gaggccttgg 120
tctggtgttg ggagcactgc agctcgagtc ttggagtcag gaggggttg ttgcacttcc 180
ctgttctgct ccttttcag ctttctggtt ccctgtagct tctggaactg attatttttg 240
tttctttaat gctgccctgt cttgtaaaag gagagccatt agcatcattt gttttcagga 300
gagaagcaga tttgaaggct caggaacttc ctgggaaagg tgacctcttt tgagccaaga 360
gctttacccc ctagtttttt gttttttttt tctcctgtct acctggagct gagaggttat 420

ccctttcaat ccctctcaag gtccagaatc accagctagg gttgggtctg cccctggagc 480
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aacagagatt gtcagagcag aggaaacgtg tattctgtgc cccagcccca ctccatgaat 600
attcccctgt ctcaaagcac atacttaggc taagaacagg at 642

<210> 129
<211> 220
<212> DNA
<213> Homo sapiens

<400> 129
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actaggcgat tcataattat atagacaagt ttttctgaaa tgttcatttg ttcatttatc 120
atttttaacc cagtctgctt ctaacaggtc ataagttaca ttccaagata tggatatgat 180
aaaactattg aatgaagtat taaaagaatc aagttcatgg 220

<210> 130
<211> 507
<212> DNA
<213> Homo sapiens

<400> 130
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aggataaaga tagtaattgc tgattcacca aaacaaaaag aagtgttaga tttgaaaatt 120
ttgtaggaaa ccaccaggtt ctcacctctt gtggtgtgtg tgtatgtgct gtatttttttt 180
ttaaactact gaaaactcaa gatctttgtt gttccacaga ttcagttctg tgtcttgtct 240
aattatgccc caggtatatg ataatgtaca gtcacgtttc ttagagtaac tcagaacatt 300
tatgacacag ggttatcttt acttctctag tctcagagtt tcacttagca ggtcatctga 360
gtgaaatcta agccagattc ctgtggatct taatgaaaag gtagtagaaa gtagtggcat 420
agcttgaaat ttaactattg tcagatattg gggcaaaaac catctgtata cctcatgggc 480
ctccagtaaa cacttgtaca ttatgag 507

<210> 131
<211> 760
<212> DNA
<213> Homo sapiens

<400> 131
tcattttgta tgaaagggga attttaggaa ttagctggag atagacattt gggaatagct 60
aggataaaga tagtaattgc tgattcacca aaacaaaaag aagtgttaga tttgaaaatt 120
ttgtaggaaa ccaccaggtt ctcacctctt gtggtgtgtg tgtatgtgct gtatttttttt 180
ttaaactact gaaaactcaa gatctttgtt gttccacaga ttcagttctg tgtcttgtct 240
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agtataaatc tgtcaatcct gtacgtgtcc ggaccgagtg aggtttcccg tgttgagtaa 720
aattaagccg cattctccac tcctggtgtt gcctaacgtc 760

<210> 132
<211> 214
<212> DNA
<213> Homo sapiens

<400> 132
caagatttgg ggcaaggaga ccagttagga ggactaatcc agaagatgga tattgatgat 60
ttcctactag agatttagaa agaagactcg agtacctagc ttttcatgtc tctgtatttg 120
ttttctcctt ttcactgccc ttttttcttc cctcatttac ccctgtgttc tgtactgtca 180
cttgcttcca gttgtcaata tgttgatttc tgtt 214

<210> 133
<211> 479
<212> DNA
<213> Homo sapiens

<400> 133
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ttcctggctc tccattcaca tcattcattt tctctacctc agacttgaca ctccagtata 120
acttttgtt gatagtagtt cagtgggata gaccatcaat tgattgcata cctccatgct 180
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tggactacat gtctctcatc aattatactt tgtatcatca gtctgattca ttcaaatagt 360
ctgtgtatta tatgtgcctc aggctaatga ctattaatac ctgtatatta gaaaagaaag 420
cctggtgctt agtagaattt tgttaaatat ttgctcagct gaaccaatgc attaatact 479

<210> 134
<211> 270
<212> DNA
<213> Homo sapiens

<400> 134
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gttgaaaatt agcccccaaa gagaattcct gcagaaggtc agggtctttg gggtatttct 120
acacttgagc ctctttcttt tttaagatga catacttgtt atagttgtca aatatggaca 180
ataacaggaa gccaaactca aataataata atagggtgtt acaaagccgt ggcacatggt 240
ccccactgta gtccagctgt ctggagctga 270

<210> 135
<211> 404
<212> DNA
<213> Homo sapiens

<400> 135
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ttgactttag atttcagtgg ggacctacaa aaaggaaaaa tggaaaggga attctgaagt 180
cttaaggtgg gctatctgaa agttggatcc ctgggtgaaa aagattttat aatattagat 240
gagttgagag aaccaatgtg aattaaagct gactggctta aaaaaaataa acccatcaaa 300
attagtaagg gaataatgtt attcattgcc ttttttttcgt tgagttatga aagctcttcg 360
aagatgaagg ttttatgaaa ctcaagatct ctccagaggc cggg 404

<210> 136
<211> 553
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (446)
<223> a, c, g or t

<400> 136
acgcgtccgt gaaaaggaag aatacctatt acttaggtat tgggaaattg aaaatgaaga 60
atggaagaaa gagggaggga agagactgtt gtgtttctat ggagaacaac attggggccc 120
ttgactttag atttcagtgg ggacctacaa aaaggaaaaa tggaaaggga attctgaagt 180
cttaaggtgg gctatctgaa agttggatcc ctgggtgaaa aagattttat aatattagat 240
gagttgagag aaccaatgtg aattaaagct gactggctta aaaaaaataa acccatcaaa 300
attagtaagg gaataatgtt attcattgcc ttttttttcgt tgagttatga aagctcttcg 360
aagatgaagg ttttatgaaa ctcaagatct ctccagaggc cgggcacagt ggctcgcgcc 420
tgtaattcca gcactttggg aggctnaggt gagcagattg cgagtccaga agtgagcaga 480
ttgcttgagt ccaggagttc gagaccagcc tgggcaacat ggcaaaaccc ctgtctctac 540
taaaaaaaaa aaa 553

<210> 137
<211> 41
<212> PRT
<213> Homo sapiens

<400> 137
Met Lys Val Arg Ser Ile His Pro Ser Ser Ala Thr Cys Ala Ser Ala
1 5 10 15

Leu His Leu Pro Gln Leu Thr Thr Glu Lys Arg Thr Gln Leu His Lys
20 25 30

Arg Asp Cys Lys Ile Arg Lys Tyr Ile
35 40

<210> 138
<211> 47
<212> PRT
<213> Homo sapiens

<400> 138
Met Val Thr Leu Gln Met Pro Ser Val Ala Ala Gln Thr Ser Leu Thr
1 5 10 15

Asn Ser Ala Phe Gln Ala Glu Ser Lys Val Ala Ile Val Ser Gln Pro
20 25 30

Val Ala Arg Ser Ser Val Ser Ala Asp Ser Arg Ile Cys Thr Glu
35 40 45

<210> 139
<211> 55
<212> PRT
<213> Homo sapiens

<400> 139
Ile Gln Asp Lys Asp Ser Val Asn Met Val Thr Leu Gln Met Pro Ser
1 5 10 15

Val Ala Ala Gln Thr Ser Leu Thr Asn Ser Ala Phe Gln Ala Glu Ser
20 25 30

Lys Val Ala Ile Val Ser Gln Pro Val Ala Arg Ser Ser Val Ser Ala
35 40 45

Asp Ser Arg Ile Cys Thr Glu
50 55

<210> 140
<211> 47
<212> PRT
<213> Homo sapiens

<400> 140

```
Met Phe Leu Tyr Ala Phe Met Tyr Ile Phe His Leu Tyr Asn Glu Cys
 1               5                  10                  15

Met Tyr Leu Leu Ser Leu Tyr Lys Leu Leu Leu Phe Val Ile Phe Phe
            20                  25                  30

Phe Phe Pro Phe Phe Gly Phe Leu Thr Phe Gln Lys Met Lys His
        35                  40                  45
```

<210> 141
<211> 70
<212> PRT
<213> Homo sapiens

```
<400> 141
Met Asn Leu Gly Asn Lys Pro Tyr Phe Leu Ile Thr Met Leu Asp His
 1               5                  10                  15

Leu Ser Pro Arg Arg Gly Trp Gly Thr Gln Asp Glu Ser Leu Gly Ser
            20                  25                  30

Leu Trp Tyr Gln Ile Leu Asn Ile Pro Ser Leu Leu Asn Ala Thr Leu
        35                  40                  45

Leu Leu Pro Leu Leu Glu Gly Lys Asn Ala Lys Met Gly Ile Ser Leu
    50                  55                  60

Ser Leu Gly Pro Val Pro
65                  70
```

<210> 142
<211> 11
<212> PRT
<213> Homo sapiens

```
<400> 142
Met Tyr Trp Tyr Ser Phe Gln Ser Ser Ser Trp
 1               5                  10
```

<210> 143
<211> 230
<212> PRT
<213> Homo sapiens

<400> 143

```
Leu Asp Arg Leu Ser Lys Ala Lys Ile Asp Lys Lys Thr Leu Asp Leu
 1               5                  10                  15

Asn Ala Thr Leu Asp Gln Met Asp Leu Thr Asp Ile Tyr Arg Thr Val
            20                  25                  30

Tyr Leu Thr Pro Thr Asp Tyr Thr Phe Phe Ser Ser Ala Cys Gly Thr
        35                  40                  45

Phe Ser Arg Ile Asp His Met Leu Ser His Lys Thr Ser Leu Asn Lys
    50                  55                  60

Phe Leu Lys Ile Gly Ile Ile Gln Ser Ile Phe Ser Asp His Lys Arg
65                  70                  75                  80

Ile Lys Leu Glu Ile His Thr Lys Arg Asn Phe Gly Asn Tyr Thr Asn
                85                  90                  95

Thr Trp Lys Leu Asn Met Leu Leu Asn Asn Tyr Trp Val Asn Glu Glu
            100                 105                 110

Ile Lys Met Glu Ile Ala Lys Phe Leu Lys Thr Asn Arg Asn Gly Asn
        115                 120                 125

Ala Thr Tyr Gln Asn Met Trp Asp Thr Ala Arg Ala Met Ala Arg Gly
    130                 135                 140

Asn Leu Thr Val Ile Asn Ala Tyr Ile Lys Lys Val Val Glu Ile Phe
145                 150                 155                 160

Ala Ile Lys Asn Leu Ser Met His Leu Lys Glu Leu Glu Lys Gln Lys
                165                 170                 175

Gln Thr Asn Pro Gln Ser Ser Arg Gln Lys Glu Ile Met Lys Ser Arg
            180                 185                 190

Ala Asp Gln Asn Glu Thr Asp Lys Lys Thr Ile Gln Arg Val Asn Glu
        195                 200                 205

Met Lys Ser Cys Phe Phe Lys Lys Ile Asn Lys Ile Asp Asn Pro Leu
    210                 215                 220

Ala Ala Leu Thr Lys Lys
225                 230
```

<210> 144
<211> 149

<212> PRT
<213> Homo sapiens

<400> 144
Met Tyr Gln Leu Arg Leu Val Thr Leu Phe Gln Ile His Met Lys Gly
1 5 10 15

Ala Ile Pro Leu Lys Leu Phe Thr Asp Val Leu Cys Lys Arg Trp Ser
20 25 30

Thr Lys Glu Thr His Gln Met Gly Gly Glu Ala Asp Pro Gly His Ala
35 40 45

Gln Arg Glu Gln Leu Gly Thr Trp Ala Gly Ile Gly Lys Lys Val Val
50 55 60

Gln Arg Ala Arg Pro Gly Pro Ala Leu Ser Gly Gly Ser Gly Gly Leu
65 70 75 80

Cys Leu Ser Ala Leu Pro Pro Gly Leu Pro Pro Met Thr Val His Pro
85 90 95

Cys Arg Asn His Leu Arg Pro Pro Thr Pro Thr Pro Ala Pro Leu Gly
100 105 110

Ser Tyr His Leu Pro Phe Pro Pro Ser Ser Leu Ser Pro Thr Lys Ala
115 120 125

Ser Leu Cys Phe Leu Glu Ala Ser Ile Thr Gly Ser Cys Pro Gly Pro
130 135 140

Ser Trp Gly Thr Arg
145

<210> 145
<211> 31
<212> PRT
<213> Homo sapiens

<400> 145
Met Gly Trp Asn Glu Glu Glu Gln Ser Cys Pro Pro Val Pro Gly Gly
1 5 10 15

Thr Val Ser Arg Lys Ile His Thr Tyr Leu Lys Leu Gln Lys Gly
20 25 30

<210> 146
<211> 106
<212> PRT
<213> Homo sapiens

<400> 146
Cys Gly Trp Trp Thr Gly Met Pro Gly Ser Ser Pro Gly Ser Leu Leu
1 5 10 15

Pro Ser Asn Arg Leu Ser Leu Val Pro Leu Val Pro Ser Ala Ser Met
20 25 30

Thr Arg Leu Met Arg Ser Arg Thr Ala Ser Gly Ser Ser Val Thr Ser
35 40 45

Leu Asp Gly Thr Arg Ser Arg Ser His Thr Ser Glu Gly Thr Arg Ser
50 55 60

Arg Ser His Thr Ser Glu Gly Thr Arg Ser Arg Ser His Thr Ser Glu
65 70 75 80

Gly Ala His Leu Asp Ile Thr Pro Asn Ser Gly Ala Ala Gly Asn Ser
85 90 95

Ala Gly Pro Lys Ser Met Glu Val Ser Cys
100 105

<210> 147
<211> 72
<212> PRT
<213> Homo sapiens

<400> 147
Met Ser His Gly Ser Gly Trp Gln Cys Tyr Ser Pro Met Asn Thr Asp
1 5 10 15

His Ser Ser Asn Thr Gly Asp Trp Ser His Thr Ala Thr Phe Leu Ser
20 25 30

Arg Gln Arg His Lys Thr Arg Lys Asn Arg Thr Thr Leu Arg Ala Val
35 40 45

Met Trp Glu Cys Gly Pro Ser Tyr Asn Thr Gln His Gln Asn Trp Thr
50 55 60

Leu His Leu Lys Gly Phe Lys Thr
65 70

<210> 148
<211> 24
<212> PRT
<213> Homo sapiens

<400> 148
Met Glu Gly Pro Thr Asn Arg Ser Ser Leu Glu Pro Pro Glu Glu Ala
1 5 10 15

Gln Pro Ser Gln Gln Phe Gly Arg
20

<210> 149
<211> 70
<212> PRT
<213> Homo sapiens

<400> 149
Met Leu Asp Leu Leu Ile Val Phe Arg Ile Lys Ser Lys Leu Leu Lys
1 5 10 15

Met Ala Phe His Asp Leu Val Ser Pro His Gln Asn Ala His Thr Met
20 25 30

Leu Leu Leu Thr Pro Ser Gln Leu Trp Leu Pro Ser Thr Cys Ser Ser
35 40 45

Gln Ala Ser Thr Ser Phe Leu Val Ser Ala Val Leu Leu Ser Pro Pro
50 55 60

Ser Leu Leu Ser Pro Gly
65 70

<210> 150
<211> 46
<212> PRT
<213> Homo sapiens

<400> 150
Met Ser Thr Cys Phe Leu Ala Ser His Gly Asn Ser Cys Leu Leu Cys
1 5 10 15

Ser Phe Ser Ile Ile Ser Leu Leu Leu Ala Ser Lys Glu Ser Phe Val
20 25 30

```
Gly Ile Leu Pro Ser Ser Ser Tyr Leu Leu Cys Lys Ile Thr
         35                  40                  45


<210> 151
<211> 40
<212> PRT
<213> Homo sapiens

<400> 151
Met Glu Arg Phe Lys Glu Arg Gly Arg Gly His Gly Ala Phe Met Pro
  1               5                  10                  15

Ser Pro Gly Thr Leu Pro Ser Arg Asn Leu Gln Thr Val Gln Leu Ser
             20                  25                  30

Gly Ser Ser Leu Asn Leu Val Ile
         35                  40


<210> 152
<211> 32
<212> PRT
<213> Homo sapiens

<400> 152
Met Leu Gly Ser Glu Cys Leu Leu Phe Met His Leu Leu Lys Lys Leu
  1               5                  10                  15

Leu Gln Gly Asn Lys Lys Arg Ile Gln Glu Arg Gly His His Gly Leu
             20                  25                  30




<210> 153
<211> 956
<212> PRT
<213> Homo sapiens

<400> 153
Met Lys Ala Glu Ile Lys Val Phe Phe Glu Thr Asn Glu Asn Lys Asp
  1               5                  10                  15

Thr Thr Tyr Gln Asn Leu Trp Asp Thr Phe Lys Ala Val Cys Arg Gly
             20                  25                  30
```

Lys Phe Ile Ala Leu Asn Ala His Lys Arg Lys Gln Glu Arg Ser Lys
35 40 45

Ile Asp Thr Leu Thr Ser Gln Leu Lys Glu Leu Glu Lys Gln Glu Gln
50 55 60

Thr His Ser Lys Ala Ser Arg Arg Gln Glu Ile Thr Lys Ile Arg Ala
65 70 75 80

Glu Leu Lys Glu Ile Gln Thr Gln Lys Thr Leu Gln Lys Ile Asn Glu
85 90 95

Ser Arg Ser Trp Phe Phe Glu Arg Ile Asn Lys Ile Asp Arg Ser Leu
100 105 110

Ala Arg Leu Ile Lys Lys Lys Arg Glu Lys Asn Gln Ile Asp Thr Ile
115 120 125

Lys Asn Asp Lys Gly Asp Ile Thr Thr Asp Pro Thr Glu Ile Gln Thr
130 135 140

Thr Ile Arg Glu Tyr Tyr Lys His Leu Tyr Ala Asn Lys Leu Glu Asn
145 150 155 160

Leu Glu Glu Met Asp Lys Phe Leu Asp Thr Tyr Thr Leu Pro Arg Leu
165 170 175

Asn Gln Glu Glu Val Glu Ser Leu Asn Arg Pro Ile Thr Gly Ala Glu
180 185 190

Ile Val Ala Ile Ile Asn Ser Leu Pro Thr Lys Lys Ser Pro Gly Pro
195 200 205

Asp Gly Phe Thr Ala Glu Phe Tyr Gln Ser Trp Ala Glu Thr Gln Pro
210 215 220

Lys Lys Glu Asn Phe Arg Pro Ile Ser Leu Met Asn Ile Asp Ala Lys
225 230 235 240

Ile Leu Asn Lys Ile Leu Ala Lys Arg Ile Gln Gln His Ile Lys Lys
245 250 255

Leu Ile His His Asp Gln Val Gly Phe Ile Pro Gly Met Gln Gly Trp
260 265 270

Phe Asn Ile Arg Lys Ser Ile Asn Val Thr Gln His Ile Asn Arg Ala
275 280 285

Lys Asp Lys Asn His Met Ile Ile Ser Ile Asp Ala Glu Lys Ala Phe
290 295 300

Asp Lys Ile Gln Gln Pro Phe Met Leu Lys Thr Leu Asn Lys Leu Gly
305 310 315 320

Ile Asp Gly Thr Tyr Phe Lys Ile Ile Arg Ala Ile Tyr Asp Asn Pro
325 330 335

Thr Ala Asn Ile Ile Leu Asn Gly Gln Lys Leu Glu Ala Phe Pro Leu
340 345 350

Lys Thr Gly Thr Arg Gln Gly Cys Pro Leu Ser Pro Leu Leu Phe Asn
355 360 365

Ile Val Leu Glu Val Leu Ala Arg Ala Ile Arg Gln Glu Lys Glu Ile
370 375 380

Lys Gly Ile Gln Leu Gly Lys Glu Glu Val Lys Leu Ser Leu Phe Ala
385 390 395 400

Asp Asn Met Ile Val Tyr Leu Glu Asn Pro Ile Val Ser Ala Gln Asn
405 410 415

Leu Leu Lys Leu Ile Ser Asn Phe Ser Lys Val Ser Gly Tyr Lys Ile
420 425 430

Asn Val Gln Lys Ser Gln Ala Phe Leu Tyr Thr Asn Asn Arg Gln Thr
435 440 445

Glu Ser Gln Ile Met Ser Gln Leu Pro Phe Thr Ile Ala Ser Lys Arg
450 455 460

Ile Lys Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe
465 470 475 480

Lys Glu Asn Tyr Lys Pro Leu Leu Lys Glu Ile Lys Glu Asp Thr Asn
485 490 495

Lys Trp Lys Asn Ile Pro Cys Ser Gly Glu Gly Arg Ile Asn Ile Val
500 505 510

Lys Met Ala Ile Leu Pro Lys Glu Leu Glu Lys Thr Thr Leu Lys Phe
515 520 525

Ile Trp Asn Gln Lys Arg Ala His Ile Ala Lys Ser Ile Leu Asn Gln
530 535 540

Lys Asn Lys Ala Gly Gly Ile Thr Leu Pro Asp Phe Lys Leu Tyr Tyr
545 550 555 560

Lys Ala Thr Val Thr Lys Thr Ala Trp Tyr Trp Tyr Gln Asn Arg Asp
565 570 575

Ile Asp Gln Trp Asn Arg Thr Glu Pro Ser Glu Ile Thr Gln His Ile
580 585 590

Tyr Ser Tyr Leu Ile Phe Asp Lys Pro Glu Lys Asn Lys Gln Trp Gly
595 600 605

Lys Asp Ser Leu Phe Asn Lys Trp Cys Trp Glu Asn Trp Leu Ala Ile
610 615 620

Cys Arg Lys Leu Lys Leu Asp Pro Phe Leu Thr Pro Tyr Thr Lys Met
625 630 635 640

Asn Ser Arg Trp Ile Lys Asp Leu Asn Val Arg Pro Lys Thr Ile Lys
645 650 655

Thr Leu Glu Glu Asn Leu Gly Ile Thr Ile Gln Asp Ile Gly Met Gly
660 665 670

Lys Asp Phe Met Ser Lys Thr Pro Lys Ala Met Ala Thr Lys Asp Lys
675 680 685

Ile Asp Lys Trp Asp Leu Val Lys Leu Lys Ser Phe Cys Thr Ala Lys
690 695 700

Glu Thr Thr Ile Arg Val Asn Arg Gln Pro Thr Lys Trp Glu Lys Ile
705 710 715 720

Phe Ala Thr Tyr Ser Ser Asp Lys Gly Leu Ile Ser Arg Ile Tyr Asn
725 730 735

Glu Leu Lys Gln Ile Tyr Lys Lys Lys Thr Asn Asn Pro Ile Lys Lys
740 745 750

Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Ala
755 760 765

Ala Lys Lys His Met Lys Lys Cys Ser Ser Ser Leu Ala Ile Arg Glu
770 775 780

Met Gln Ile Lys Thr Thr Met Arg Tyr His Leu Thr Pro Val Arg Met
785 790 795 800

Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly
805 810 815

Glu Thr Gly Thr Leu Leu His Cys Trp Trp Asp Cys Lys Leu Ala Gln
820 825 830

Pro Leu Trp Lys Ser Val Trp Arg Phe Leu Arg Asp Leu Glu Leu Glu
835 840 845

Ile Pro Phe Asp Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp
850 855 860

Tyr Lys Ser Cys Cys Tyr Lys Asp Thr Cys Thr Arg Met Phe Ile Ala
865 870 875 880

Ala Leu Phe Thr Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys Pro Thr
885 890 895

Ile Ile Asp Trp Ile Lys Lys Met Trp His Ile Tyr Thr Met Glu Tyr
900 905 910

Tyr Ala Ala Ile Lys Asn Asp Glu Phe Val Ser Phe Val Gly Thr Trp
915 920 925

Met Lys Leu Glu Ile Ile Ile Leu Ser Lys Leu Ser Gln Glu Gln Lys
930 935 940

Thr Thr His Arg Ile Phe Ser Leu Ile Gly Gly Asn
945 950 955

<210> 154
<211> 39
<212> PRT
<213> Homo sapiens

<400> 154
Met Ile Ile Thr Ser Gln Gly Asn Phe Leu Phe Pro Leu Phe Ile Ser
1 5 10 15

Leu Leu His His Tyr Ser Gln Ser Leu Ser Leu Phe Pro Lys Glu Val
20 25 30

Phe His Gly Phe Leu Thr Asp
35

<210> 155
<211> 37
<212> PRT
<213> Homo sapiens

<400> 155
Met Val Leu Ser Cys Tyr Ser Leu Val Thr Phe Arg Ser Ser Leu Leu
1 5 10 15

Thr Lys Gly Lys Ile Ile Tyr Lys Tyr Gln Met Thr Ile Glu Leu Ser
20 25 30

Gln Leu Met Phe Phe
35

<210> 156
<211> 110
<212> PRT
<213> Homo sapiens

<400> 156
Met Gly Cys His Gly Gly Ala Arg Asp Ser Cys Val Asn Arg Glu Cys
1 5 10 15

Gly Phe Leu Gln Arg Gly Val Trp Arg Trp Thr Ser Arg Ser Phe Trp
20 25 30

Ser Leu Arg Glu Gly Gln Gln Ser Ser Arg His Phe Met Asn His Ile
35 40 45

Leu Ala Val Ala Ala Phe Ala Ser Pro Gly Gly Trp Ser His Ala Leu
50 55 60

Ala Ala Arg Leu Arg His Pro Pro Val His Ser Val Pro Trp Pro Pro
65 70 75 80

Ala Val Gly Leu Ala Leu Phe Ser Thr Asn Asn Pro Gln Cys Ile Val
85 90 95

Met Thr Ser Ala Thr Asn Val Asp Val Ser Met Tyr His Ile
100 105 110

<210> 157
<211> 62
<212> PRT
<213> Homo sapiens

<400> 157
Met Gly Ser His Phe Pro Gln Ser Arg Trp His Lys Leu His Glu Val
1 5 10 15

Ala Ala Val Pro Leu His Pro Asp Gln Ser Leu Ala Pro Gln Trp Asn
20 25 30

His Thr Pro Pro Leu Pro Glu Ala Glu Ser Leu Phe Tyr Gly Arg Ala
35 40 45

Ala Ala Leu Gly Thr Phe Leu Asn Ser Pro Val Phe His Leu
50 55 60

<210> 158
<211> 241
<212> PRT
<213> Homo sapiens

<400> 158
Glu Gly Cys Leu Trp Pro Ser Glu Ser Thr Val Ser Gly Asn Gly Ile
1 5 10 15

Pro Glu Cys Pro Cys Cys Trp Asp Pro Pro Cys Arg Arg Ser Ser Ala
20 25 30

Pro Cys Pro Ala Gly Ser Ser Pro Ala Leu Cys Ser Leu His Thr Gly
35 40 45

Ala Arg Thr Leu Pro Leu Phe Gly Gly Gly Arg Pro Gln Val Tyr Ala
50 55 60

Pro Pro Arg Pro Thr Asp Arg Leu Ala Val Pro Pro Phe Ala Gln Arg
65 70 75 80

Glu Arg Phe His Arg Phe Gln Pro Thr Tyr Pro Tyr Leu Gln His Glu
85 90 95

Ile Asp Leu Pro Pro Thr Ile Ser Leu Ser Asp Gly Glu Glu Pro Pro
100 105 110

Pro Tyr Gln Gly Pro Cys Thr Leu Gln Leu Arg Asp Pro Glu Gln Gln
115 120 125

Leu Glu Leu Asn Arg Glu Ser Val Arg Ala Pro Pro Asn Arg Thr Ile
130 135 140

```
Phe Asp Ser Asp Leu Met Asp Ser Ala Arg Leu Gly Gly Pro Cys Pro
145                 150                 155                 160

Pro Ser Ser Asn Ser Gly Ile Ser Ala Thr Cys Tyr Gly Ser Gly Gly
                165                 170                 175

Arg Met Glu Gly Pro Pro Pro Thr Tyr Ser Glu Val Ile Gly His Tyr
            180                 185                 190

Pro Gly Ser Ser Phe Gln His Gln Gln Ser Ser Gly Pro Pro Ser Leu
        195                 200                 205

Leu Glu Gly Thr Arg Leu His His Thr His Ile Ala Pro Leu Glu Ser
    210                 215                 220

Ala Ala Ile Trp Ser Lys Glu Lys Asp Lys Gln Lys Gly His Pro Leu
225                 230                 235                 240

Leu
```

<210> 159
<211> 50
<212> PRT
<213> Homo sapiens

<400> 159

```
Met Ile His Phe Leu Ser Phe Ser Thr Asn Asn Ala Tyr Ala Leu Asp
  1               5                  10                  15

Leu Pro Glu Tyr Ser Trp Thr Thr Asp Leu Cys Lys Lys Leu Phe Phe
             20                  25                  30

Leu Lys Ile Ala Ser Lys Gln Asn Gly Phe Asn Lys Leu Gln Asn Arg
         35                  40                  45

Gln Pro
     50
```

<210> 160
<211> 37
<212> PRT
<213> Homo sapiens

<400> 160

```
Met Ile Cys Pro Phe Phe Leu His Ser Phe Thr Ser Ser Ser Phe Tyr
```

```
  1               5                  10                  15

Cys Tyr Phe Leu Lys Arg Ile Asn Pro Leu Ala Val Leu Phe Arg Val
             20                  25                  30

Phe Phe Thr Leu Phe
         35
```

<210> 161
<211> 75
<212> PRT
<213> Homo sapiens

<400> 161

```
Met Leu Val Lys Ser Arg Cys Leu Cys Leu Cys Pro Phe Cys Leu Gly
  1               5                  10                  15

Leu Leu Glu Thr Asp Ala Gly Gly Ser Val Ala Pro His Cys Ser Gly
             20                  25                  30

Tyr Val Pro Trp Ser Gln Ala Leu Leu Leu Leu Arg Ser Leu Leu Glu
         35                  40                  45

Met Gln Asn Leu Arg Pro Asn Ser Arg Pro Met Thr Gln Ser Leu His
     50                  55                  60

Phe Asn Arg Cys Leu Cys Asp Ser Cys Ala Gly
 65                  70                  75
```

<210> 162
<211> 105
<212> PRT
<213> Homo sapiens

<400> 162

```
Gln Met Gln Gln Gln Asn Thr Gln Lys Val Glu Ala Ser Lys Val Pro
  1               5                  10                  15

Glu Tyr Ile Lys Lys Ala Ala Lys Lys Ala Ala Glu Phe Asn Ser Asn
             20                  25                  30

Leu Asn Arg Glu Arg Met Glu Glu Arg Arg Ala Tyr Phe Asp Leu Gln
         35                  40                  45

Thr His Val Ile Gln Val Pro Gln Gly Lys Tyr Lys Val Leu Pro Thr
     50                  55                  60
```

Glu Arg Thr Lys Val Ser Ser Tyr Pro Val Ala Leu Ile Pro Gly Gln
65 70 75 80

Phe Gln Glu Tyr Tyr Lys Ser Ile Ala Ala Phe Ala Leu His Cys Ile
85 90 95

Gly Tyr Trp Ala Gly Val Ser Glu Pro
100 105

<210> 163
<211> 44
<212> PRT
<213> Homo sapiens

<400> 163
Met Thr Pro His Cys Pro Gln Asn Arg Leu His Phe Leu Leu Ala Tyr
1 5 10 15

Lys Ala Asn Leu Asn Leu Thr Pro Gly Arg His Pro Ala Thr Val Thr
20 25 30

His Ile Leu Val Ile Pro Ser Thr Ile Gly Arg Leu
35 40

<210> 164
<211> 25
<212> PRT
<213> Homo sapiens

<400> 164
Met Thr Met Trp Asn Cys Leu Leu Thr Cys Lys Val Thr His Asn Ile
1 5 10 15

Met Val Lys Phe Leu Lys Ser Asn Tyr
20 25

<210> 165
<211> 67
<212> PRT
<213> Homo sapiens

<400> 165
Met Thr Gly Tyr Cys Met Trp Glu Ile Met Lys Pro Phe Ala Val Ser
1 5 10 15

Ser Pro Val Ser Phe Arg Val Ser Val Leu Ser Lys Pro Pro Cys Glu
20 25 30

Val Asn Gln Met Leu Asp Phe Phe Pro Gln Ser His Gln Leu Pro Arg
35 40 45

Glu Arg Asp Thr Tyr Arg Thr Leu Pro Ser Ala Tyr Ser Ser Ser Ala
50 55 60

Pro Ser Thr
65

<210> 166
<211> 42
<212> PRT
<213> Homo sapiens

<400> 166
Met Leu Glu Met Ser Phe Ala Leu Pro Glu Phe Ala Lys Gly Ala His
1 5 10 15

Arg Lys Gln Ile Glu Lys His Pro Leu Gly Thr Ser Leu Gln Cys Leu
20 25 30

Leu Leu Thr Lys Phe Asn Ile Ile Asn Thr
35 40

<210> 167
<211> 47
<212> PRT
<213> Homo sapiens

<400> 167
Met Ala Ser Val Ala Arg Lys Tyr Ala Lys Glu Glu Val Asn Pro Ile
1 5 10 15

Ala Gly Leu Glu Asp Ser Asp Gln Thr Thr Arg Gly Leu Leu Asn Lys
20 25 30

Gly Arg Arg Cys Pro Cys Leu Met Gly Leu Ala Trp Gly Gly Gly
35 40 45

<210> 168
<211> 74

<212> PRT
<213> Homo sapiens

<400> 168
Met Arg Phe Ser His Phe Phe Pro Val Phe Phe Ile Thr Phe Arg Lys
1 5 10 15

Ala Ile Leu Phe Ser Leu Tyr Thr Thr Cys Thr Leu Leu Val Gly Leu
20 25 30

Ile Pro Arg Cys Ile Asn Ile Ile Ala Phe Met Asn Gly Ile Phe Phe
35 40 45

Ile Val Phe Ser Asn Cys Leu Leu Asp Tyr Met Glu Ile Asp Phe Trp
50 55 60

His Ala Asp Ile Ser Ser Lys Lys Leu Tyr
65 70

<210> 169
<211> 27
<212> PRT
<213> Homo sapiens

<400> 169
Met Thr Lys Tyr Ser Pro Leu Pro Leu Phe Leu His Phe Ile Leu Thr
1 5 10 15

Thr Ile Phe Phe Leu Ala Pro Phe Pro Leu Phe
20 25

<210> 170
<211> 54
<212> PRT
<213> Homo sapiens

<400> 170
Met Leu Lys Val Arg Arg Leu Lys Asn Xaa Arg Ala Thr Val Trp Leu
1 5 10 15

Pro Gly Ile Gly Lys Gln Val Met Asp Phe Ser Leu Lys Gly Glu Ile
20 25 30

Ser Gly Val Gln Leu Gln His Leu Leu Leu Ile Asn Leu Ser Val Cys
35 40 45

Ala Ser Ser Ser Ile Glu
50

<210> 171
<211> 14
<212> PRT
<213> Homo sapiens

<400> 171
Met Pro Thr Gln Arg Gln Pro Leu Ser Ser Gln Ala Val Lys
1 5 10

<210> 172
<211> 42
<212> PRT
<213> Homo sapiens

<400> 172
Met Ala Ala Ser Val Leu Gln Ser Arg Trp Leu Ile Val Ile Leu Val
1 5 10 15

Gln Lys Arg Ile His Thr His Thr Tyr Lys Tyr Val Ser Cys Leu Asp
20 25 30

Pro Gln Glu Phe His Val Ser Leu Tyr Leu
35 40

<210> 173
<211> 121
<212> PRT
<213> Homo sapiens

<400> 173
Met Arg Thr Ser Lys Trp Ile Pro Pro Cys Lys Cys Gly Ala Gly Ala
1 5 10 15

Thr Arg His Cys Ser Gly His Ala Ser Lys Thr Gln Ala Glu Gly Ala
20 25 30

Ala His His Ala Gly Asp Gly Leu Lys Ala Pro Val His Ala Trp Asp
35 40 45

Ser Ala Gln Gly Pro Cys Ser Cys Leu Gly Gln Ala Pro Gly Pro Pro
50 55 60

Leu Ala Ala Val Ser Ser Gly Gln Gly Gly Gly Gly Arg Tyr Gly His
65 70 75 80

Ser Val Gly Arg Ser Trp Glu Asn Lys Ala Tyr Tyr Trp Thr Pro Gly
85 90 95

Gly His Gly Asn His Thr Arg Met Pro Glu Thr Glu Asn Leu Trp Ala
100 105 110

Ser Arg Ser Ser Ser Ser Cys Thr Gly
115 120

<210> 174
<211> 25
<212> PRT
<213> Homo sapiens

<400> 174
Met Gly Asn Tyr Ala Asn Asn Lys Lys Arg Thr Leu Arg Ser Ile Asn
1 5 10 15

Thr Val His Lys Tyr Gly Gly Leu Phe
20 25

<210> 175
<211> 33
<212> PRT
<213> Homo sapiens

<400> 175
Met Pro Ser Phe Arg Ile Leu Asp Thr Cys Cys Phe Ser Pro Ser His
1 5 10 15

Glu Thr Phe Cys Lys Asn Lys Glu Arg Gly Ile Thr Val Cys His His
20 25 30

Ser

<210> 176
<211> 30
<212> PRT
<213> Homo sapiens

<220>

<221> UNSURE
<222> (7)

<220>
<221> UNSURE
<222> (11)

<400> 176
Met Ile Phe Pro Val Lys Xaa Leu Ile Arg Xaa Ile Pro Arg Asn Leu
1 5 10 15

Leu Tyr Ile Met Asp Phe Asp Ile Tyr Leu Val Lys Val Lys
20 25 30

<210> 177
<211> 42
<212> PRT
<213> Homo sapiens

<400> 177
Met Val Ala Ser Val Met Glu Ser Ala Asp Leu Glu Glu Gln Thr Gln
1 5 10 15

Leu Val Thr Glu Leu Pro Gly Gly Arg Leu Ser Leu Gly Met Glu Gly
20 25 30

Tyr Arg Asn Phe Arg Val Leu Gln Asn Phe
35 40

<210> 178
<211> 80
<212> PRT
<213> Homo sapiens

<400> 178
Met Tyr Phe Pro Pro Ala Phe Phe Phe Pro Phe Glu Tyr Val Ser Leu
1 5 10 15

Asn Leu Phe Ser Lys Ser Ala Arg Leu Ala Leu Ser Ser His Phe Leu
20 25 30

Ser Leu Ser Ser Ser Tyr Leu Ser Val Phe Phe Leu Leu Val Leu Leu
35 40 45

Phe Leu Tyr Phe Ser Pro Ser Leu His Ile His His His Lys Gln Thr
50 55 60

```
Tyr Thr Phe Gln Lys Leu Val Pro Phe Trp Pro Pro Phe Asn Asn Arg
 65                  70                  75                  80
```

<210> 179
<211> 40
<212> PRT
<213> Homo sapiens

<400> 179

```
Met Arg Val Trp Asp Pro Phe Leu Thr Leu Ile Leu Ile Lys Gln Gln
  1               5                  10                  15

Ile Phe Ile Ile Asn Glu Ile Tyr Asn Tyr Val Asn Leu Ile Asp Ile
            20                  25                  30

Gly Ile Val Ser Arg Ile Phe Ile
        35                  40
```

<210> 180
<211> 82
<212> PRT
<213> Homo sapiens

<400> 180

```
Met Arg Tyr Thr Arg Gly Arg Arg Pro Lys Arg Arg Tyr Ile Gly His
  1               5                  10                  15

Leu Pro Val Phe Phe Gln Val His Phe Leu Pro Phe Ser Ala Leu Cys
            20                  25                  30

Tyr Asn Ser Glu Thr Asn Ile Phe Gln Leu Ser Cys Phe Leu Asp Phe
        35                  40                  45

Lys Lys Ala Ser Glu Arg His Cys Gly Lys Pro Lys Gly Pro Met Trp
    50                  55                  60

Lys Gln Ala Thr Phe His Leu Leu Arg Leu Ser Ala Ser Ser Ser Ile
 65                  70                  75                  80

Cys Ser
```

<210> 181
<211> 23
<212> PRT
<213> Homo sapiens

<400> 181
Met Asp Val Ile Asp Val Pro Lys Glu Ser Val Leu Asn Leu Ile Gln
1 5 10 15

Ser Pro Gly Ser Ser Cys Leu
20

<210> 182
<211> 95
<212> PRT
<213> Homo sapiens

<400> 182
Met Arg Ser Ala Glu Lys Glu Arg Glu Glu Asn Thr Asn Lys Ser Leu
1 5 10 15

Ser Ser Leu Ser Pro Val Ser Phe Pro Gln His Val Lys Gly Pro Gly
20 25 30

Pro Lys Phe Pro Leu Pro Cys Val Leu Glu Ala Leu Leu Leu Phe Asn
35 40 45

Leu Asp Thr Leu Lys Arg Glu Ala Gln Asn Thr Val Thr Val Leu Asn
50 55 60

Ser Lys Pro Cys His Val Thr Ser Leu His Thr Gly Leu Ala Glu Thr
65 70 75 80

Ser Val Gly Lys Gly Ala Ala Glu Asn Ser Val Lys Arg Lys Gln
85 90 95

<210> 183
<211> 31
<212> PRT
<213> Homo sapiens

<400> 183
Met Arg Asn Leu Met Trp Gly Ile Arg Glu Arg Ile Lys Ser Asp Phe
1 5 10 15

```
Arg Val Phe Gly Val Ser Ile Trp Lys Ser Glu Val Ala Ile His
            20                  25                  30


<210> 184
<211> 54
<212> PRT
<213> Homo sapiens

<400> 184
Met Ser Phe Pro Thr Lys Gln Phe Gly Val Thr Thr Val Ile Pro Val
  1               5                  10                  15

Ser Tyr Gly Trp Gly Leu Cys Ile Gly Met Cys Thr Leu Lys Phe Ile
            20                  25                  30

His Leu Phe Ser Thr Ile Leu Phe Glu His Leu Leu Ser Val Arg Ala
        35                  40                  45

Leu Ser Val Val Arg Tyr
    50


<210> 185
<211> 13
<212> PRT
<213> Homo sapiens

<400> 185
Met Lys Arg Glu Leu Ser Ile Leu Ile Lys Ser Lys Gly
  1               5                  10


<210> 186
<211> 51
<212> PRT
<213> Homo sapiens

<400> 186
Lys Ile Gln Ala Lys Gln Ile Lys Lys Arg Ile Gln Arg Ile Ile His
  1               5                  10                  15

His Asp Gln Val Gly Phe Ile Pro Gly Ile Gln Gly Trp Phe Asn Ile
            20                  25                  30

Ala Lys Ser Ile Asp Glu Thr His Lys Ile Glu Arg Ile Lys Met Arg
        35                  40                  45
```

Ser Leu Met
50

<210> 187
<211> 14
<212> PRT
<213> Homo sapiens

<400> 187
Met Lys Gly Ser Tyr Leu Ile Pro Asn Phe Leu Leu Glu Pro
1 5 10

<210> 188
<211> 56
<212> PRT
<213> Homo sapiens

<400> 188
Met Asp Val Ser Ala Cys Gly Arg Leu Tyr Phe Ser Lys Met Thr Thr
1 5 10 15

Lys Ile Ser Pro Ile Ser Cys Val Ile Leu Gln Trp Gly Leu Cys Pro
20 25 30

Leu Phe Leu Asn Val Cys Ala Leu Val Thr Ala Leu Thr Asn Arg Val
35 40 45

Trp Gly Arg Met Pro Cys Asp Phe
50 55

<210> 189
<211> 29
<212> PRT
<213> Homo sapiens

<400> 189
Met Ala Leu Lys Arg Ile Val Ser His Ser Thr Arg Glu Gly Gly Thr
1 5 10 15

His Leu Glu Arg Cys His Arg Thr Pro Ile Pro Ser Gly
20 25

<210> 190
<211> 34

<212> PRT
<213> Homo sapiens

<400> 190
Met Thr Lys Pro Pro Ile Leu Thr Pro Trp Ser Leu Leu Ser Arg Ser
1 5 10 15

Pro Leu Cys Ser Phe Gln Ser His Glu Glu Gly Glu Gly Arg Pro Arg
20 25 30

Gln Gly

<210> 191
<211> 42
<212> PRT
<213> Homo sapiens

<400> 191
Met Pro Glu Ala Leu Pro Gly Pro Gly Arg Ile Lys Ser Leu Thr Val
1 5 10 15

Trp Gly Leu Val Trp Pro Phe Thr His Ile Thr Leu Gln Asn Thr Phe
20 25 30

Gln Gly Asp Ile Ser Val Ser Ser Ile Leu
35 40

<210> 192
<211> 59
<212> PRT
<213> Homo sapiens

<400> 192
Met Val Gly His Lys Cys Leu Phe Asn Phe Asp Leu Leu Ala Phe Ser
1 5 10 15

Ile Gln Ala Val Thr Leu Pro His Lys Thr Leu Gly Ala Leu Ala Arg
20 25 30

Gly Asp Cys Thr Ser Ser Pro Gln Met Phe Ser Lys Lys Leu Pro Gly
35 40 45

Thr Leu Leu Leu Gly Tyr Thr Lys Ser Arg Gln
50 55

<210> 193
<211> 87
<212> PRT
<213> Homo sapiens

<400> 193
Arg Gln Cys Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile
1 5 10 15

Ala Ala His Cys Asn Pro Arg Leu Pro Gly Ser Ser Asp Ser Tyr Ala
20 25 30

Ser Ala Ser Arg Ala Ala Gly Ile Thr Asp Ala His Gln Asp Thr Gln
35 40 45

Pro Ile Phe Val Phe Leu Val Glu Met Gly Leu His His Val Cys Gln
50 55 60

Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Thr Leu Ala Ser
65 70 75 80

Gln Val Leu Gly Leu Gln Ala
85

<210> 194
<211> 117
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (34)..(72)

<220>
<221> UNSURE
<222> (102)

<220>
<221> UNSURE
<222> (113)

<400> 194
Met Gly Lys Ala Leu Phe Cys Gly Leu Trp Pro Leu Lys Ser Ile Cys
1 5 10 15

Leu Leu Leu Leu Ser Gln Gly Ser Asp Ala Ala Leu Thr Ile Leu Leu

```
            20                  25                  30

Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
         35                  40                  45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
     50                  55                  60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Val Lys Cys Thr Glu Ala Cys
 65                  70                  75                  80

Ile Phe Glu Thr Ser Lys Gly Arg Arg Leu Arg Arg Ser Pro Leu Gln
                 85                  90                  95

Gly His Leu His Leu Xaa Tyr Val Ala Phe Pro Ser Asn Asn Glu Ala
            100                 105                 110

Xaa His Trp Val Leu
        115


<210> 195
<211> 47
<212> PRT
<213> Homo sapiens

<400> 195
Met Trp Val Ala Val Pro Asp Phe Pro Leu Leu Pro Ala Val Gly Asp
  1               5                  10                  15

Glu Leu Leu Ala Leu Gly Pro Asp Phe Pro Gly Trp Pro Leu Arg Ser
             20                  25                  30

Arg Gly Phe Lys Phe Ser Trp Ser Cys Ser Val Leu Val Gln His
         35                  40                  45


<210> 196
<211> 34
<212> PRT
<213> Homo sapiens

<400> 196
Met Phe Ser Leu Thr Pro Leu Glu Lys Ser Pro Ser Trp Leu Leu Ser
  1               5                  10                  15

Gln His Cys Pro Leu Val Ala Cys Ser Pro Trp Cys Phe Leu Ala Val
             20                  25                  30
```

Ala Thr

<210> 197
<211> 51
<212> PRT
<213> Homo sapiens

<400> 197
Met Pro Phe Pro Trp Gly Gly Leu Pro Ser Leu Ser Asn Ser Ser Leu
1 5 10 15

Cys Trp Ser Ser Leu Pro Cys His Ser Thr Leu Ser Phe His Ser Val
20 25 30

Cys Trp Tyr Cys Lys Tyr Leu Ile Leu Cys Ile Cys Ser Leu Ser Ala
35 40 45

Ser Ser Gln
50

<210> 198
<211> 286
<212> PRT
<213> Homo sapiens

<400> 198
Asn Phe Leu Glu Thr Asp Asn Glu Gly Asn Gly Ile Leu Arg Arg Arg
1 5 10 15

Asp Ile Lys Asn Ala Leu Tyr Gly Phe Asp Ile Pro Leu Thr Pro Arg
20 25 30

Glu Phe Glu Lys Leu Trp Ala Arg Tyr Asp Thr Glu Gly Lys Gly His
35 40 45

Ile Thr Tyr Gln Glu Phe Leu Gln Lys Leu Gly Ile Asn Tyr Ser Pro
50 55 60

Ala Val His Arg Pro Cys Ala Glu Asp Tyr Phe Asn Phe Met Gly His
65 70 75 80

Phe Thr Lys Pro Gln Gln Leu Gln Glu Glu Met Lys Glu Leu Gln Gln
85 90 95

```
Ser Thr Glu Lys Ala Val Ala Ala Arg Asp Lys Leu Met Asp Arg His
            100                 105                 110

Gln Asp Ile Ser Lys Ala Phe Thr Lys Thr Asp Gln Ser Lys Thr Asn
        115                 120                 125

Tyr Ile Ser Ile Cys Lys Met Gln Glu Val Leu Glu Glu Cys Gly Cys
    130                 135                 140

Ser Leu Thr Glu Gly Glu Leu Thr His Leu Leu Asn Ser Trp Gly Val
145                 150                 155                 160

Ser Arg His Asp Asn Ala Ile Asn Tyr Leu Asp Phe Leu Arg Ala Val
                165                 170                 175

Glu Asn Ser Lys Ser Thr Gly Ala Gln Pro Lys Glu Lys Glu Glu Ser
            180                 185                 190

Met Pro Ile Asn Phe Ala Thr Leu Asn Pro Gln Glu Ala Val Arg Lys
        195                 200                 205

Ile Gln Glu Val Val Glu Ser Ser Gln Leu Ala Leu Ser Thr Ala Phe
    210                 215                 220

Ser Ala Leu Asp Lys Glu Asp Thr Gly Phe Val Lys Ala Thr Glu Phe
225                 230                 235                 240

Gly Gln Val Leu Lys Asp Phe Cys Tyr Lys Leu Thr Asp Asn Gln Tyr
                245                 250                 255

His Tyr Phe Leu Arg Lys Leu Arg Ile His Leu Thr Pro Tyr Ile Asn
            260                 265                 270

Trp Lys Tyr Phe Leu Gln Asn Phe Ser Cys Phe Leu Glu Glu
        275                 280                 285


<210> 199
<211> 64
<212> PRT
<213> Homo sapiens

<400> 199
Met Ser Gln Gln Gly Phe Phe Arg Leu Phe Gly Ile Tyr Ser Leu Pro
  1               5                  10                  15

Ala Arg Pro Val Asn Ser Ser Arg Phe Ser Val Ser Phe Gln Ile Gly
             20                  25                  30
```

Thr Thr Arg Asn His Gln Leu Leu Ser Tyr Thr Leu Asp Met Leu His
35 40 45

His Phe Asp Val Val Gly Phe Asp Tyr Tyr Lys Ile Asp Pro Asn Tyr
50 55 60

<210> 200
<211> 35
<212> PRT
<213> Homo sapiens

<400> 200
Met Asn Lys Ile Ser Cys Phe Asn Glu Ala Asn Met Thr Ile Gln Gln
1 5 10 15

Cys Gly Phe Gly Ile Arg Lys Ile Leu Lys Ile Leu Ile Val Ser Phe
20 25 30

Ser Leu Pro
35

<210> 201
<211> 66
<212> PRT
<213> Homo sapiens

<400> 201
Met Ser Leu Ile Leu Thr Phe His Leu Leu Leu Thr Arg Gln Ala Leu
1 5 10 15

Ser Pro Leu Thr Trp Ile Thr Glu Leu Thr Ser Glu Leu Gln Val Val
20 25 30

Ala Ser Ser Gly Pro Val Pro Ser Val Leu Phe Leu Pro Ala Arg Ile
35 40 45

Thr Cys Arg Ala Asp Arg Leu Phe Ala His Gly Leu His Lys Ala Ser
50 55 60

Arg Ala
65

<210> 202
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (16)

<220>
<221> UNSURE
<222> (20)

<400> 202
Met Tyr Ala Thr Lys Lys His Val Ser Met Cys Val Asn Leu Lys Xaa
1 5 10 15

Ile Asn Gly Xaa Phe Trp Glu Val Phe Arg Ser
20 25

<210> 203
<211> 47
<212> PRT
<213> Homo sapiens

<400> 203
Met Pro Cys Leu Phe Ser Thr Ser Thr Phe Asn Phe Leu Thr Lys Ile
1 5 10 15

Lys Cys Tyr Val Phe Ser Lys Ala Asp Leu Leu Pro Ser Ser Leu Ser
20 25 30

Phe Gly Ser Ser His Tyr Gln His Ser His Pro Pro Thr Leu Lys
35 40 45

<210> 204
<211> 19
<212> PRT
<213> Homo sapiens

<400> 204
Met His Gln Ser Val Ser Leu Arg Thr Ala Trp Ala Arg His Gly Trp
1 5 10 15

Ser Arg Leu

<210> 205
<211> 22
<212> PRT
<213> Homo sapiens

<400> 205
Met Lys Ile Gln Gly Lys Asn Ile Tyr Asn Thr Thr Met Leu Lys Asp
1 5 10 15

Pro Phe Phe Tyr Leu Thr
20

<210> 206
<211> 29
<212> PRT
<213> Homo sapiens

<400> 206
Met Lys Phe His Ser Asp Pro Ser Cys Val Pro Ser Ile Gln Ile Asn
1 5 10 15

Lys Arg Asp Tyr Arg Arg Gly Pro Leu Arg Leu Ala Asn
20 25

<210> 207
<211> 21
<212> PRT
<213> Homo sapiens

<400> 207
Met Leu Pro Pro Tyr Leu Pro Lys Leu Leu Leu Gln Phe Val Phe Leu
1 5 10 15

Pro Val Ile Tyr Lys
20

<210> 208
<211> 29
<212> PRT
<213> Homo sapiens

<400> 208

Met Arg Asn Val Gln Arg Lys Phe Tyr Asn Lys Arg Val Gln Gln Gly
1 5 10 15

Cys Lys Ile Lys Asp Lys His Ile Asn Ser Ser Cys Ile
20 25

<210> 209
<211> 42
<212> PRT
<213> Homo sapiens

<400> 209
Met Glu Leu Pro Leu Phe Ser Leu Ser Cys Ser Tyr Lys Pro Cys Ala
1 5 10 15

Phe Phe Asp His Ser Thr Ala Thr Ala Ala Leu Val Met Pro Phe Leu
20 25 30

Ile Ile Pro Gly Ser His Thr Thr Arg Pro
35 40

<210> 210
<211> 18
<212> PRT
<213> Homo sapiens

<400> 210
Met Gly Tyr Leu Gly Leu Gly Met Ala Ala Gly Phe Lys Glu Arg Val
1 5 10 15

Val Glu

<210> 211
<211> 70
<212> PRT
<213> Homo sapiens

<400> 211
Met Glu Leu Leu Gly Ser Asp Arg Ser Pro Val Ser Phe Leu Ile His
1 5 10 15

Trp Leu Pro Thr Arg Leu Pro His Gly Val Ser Leu Gly Ser Arg Leu
20 25 30

```
Ser Ile Leu Ser Thr Phe Thr Tyr Val Asp Trp Leu Ala Glu Val Ser
         35                  40                  45

Thr Leu Gly Leu Asp Trp Lys Ile Leu Gln Thr Lys Lys Ala Arg Asp
     50                  55                  60

Ser Val Pro Pro Thr Ser
 65                  70


<210> 212
<211> 44
<212> PRT
<213> Homo sapiens

<400> 212
Met Ala Asp Phe Asn Trp Met Leu Tyr Leu Gly Phe Ser Lys Ala Lys
  1               5                  10                  15

Lys Val Tyr Thr Leu Leu Gln Leu Gly Val Gly Leu Gln Ala Val Cys
            20                  25                  30

Tyr Ile His Val Leu Val Pro Val Ile Leu Thr Phe
         35                  40


<210> 213
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (3)

<220>
<221> UNSURE
<222> (14)

<400> 213
Met Cys Xaa Leu Gln Thr Val Tyr Ser Trp Thr Leu Leu Xaa Tyr Phe
  1               5                  10                  15

Asn Pro Ser Asp Asn Leu Cys Ile Leu Ile Arg Phe Leu Asn Pro Phe
            20                  25                  30

Thr Phe Asn Val Met Phe Asp Ile Ser Trp Ile Tyr Ser Cys His Phe
         35                  40                  45
```

Thr Phe Gly Leu Leu Cys Leu Met Tyr Phe Ser Val Leu Leu Phe Leu
50 55 60

Pro Tyr Cys Phe Leu Leu His
65 70

<210> 214
<211> 22
<212> PRT
<213> Homo sapiens

<400> 214
Met Thr Arg Ile Cys Cys Lys Ile His Phe Leu Lys Cys Leu Lys Lys
1 5 10 15

Glu Met Glu Ile Ser Ser
20

<210> 215
<211> 55
<212> PRT
<213> Homo sapiens

<400> 215
Met Phe Ser Met Leu Arg Tyr Cys Tyr Gln Cys Pro Leu Pro Leu Lys
1 5 10 15

Met Thr Ala Glu Ser Lys His Phe Pro Glu Asn Ser Tyr Thr Gln Ile
20 25 30

Phe Val Pro Leu Phe Phe Tyr Thr Ala Pro Cys Leu Phe Ile Ser Val
35 40 45

His Ser Ser Tyr His Met Leu
50 55

<210> 216
<211> 49
<212> PRT
<213> Homo sapiens

<400> 216
Met Pro Ser Ala Phe Glu Asn Asp Cys Arg Ile Gln Thr Phe Ser Arg
1 5 10 15

```
Lys Leu Leu Tyr Ile Asp Leu Cys Ser Phe Ile Leu Leu His Ser Thr
             20                  25                  30

Leu Phe Val His Lys Cys Ser Gln Leu Ile Ser His Val Val Ile Met
         35                  40                  45

Cys
```

```
<210> 217
<211> 62
<212> PRT
<213> Homo sapiens

<400> 217
Met Glu Arg Cys Ala Gly Ser Glu Pro Ala Arg Lys Glu Asn Ile Ser
  1               5                  10                  15

Arg Leu Phe Cys Arg Met Gln Asn Trp Val Tyr Leu Gln Thr Asp Val
             20                  25                  30

Leu Pro Ser Lys Gly Leu Ala Thr Thr Phe Asp Pro Gln Ser Lys Val
         35                  40                  45

Asn Thr Ala Ile His Cys Ser Gln Thr Arg Val His Leu Pro
     50                  55                  60
```

```
<210> 218
<211> 29
<212> PRT
<213> Homo sapiens

<400> 218
Met Thr Thr Ser Ser Arg Thr Ile Ile Gly Lys Ile Gln Asp Leu Ser
  1               5                  10                  15

Val Leu Ser Thr Val Ser Gln Ile Ser Asp Arg Pro Arg
             20                  25
```

```
<210> 219
<211> 28
<212> PRT
<213> Homo sapiens
```

<400> 219
Met Gly Phe Tyr His Lys Gly Met Ser Glu Thr Phe Ile Cys Ala Gly
1 5 10 15

Thr Ser Ala Gln Ser Leu Asn Ala Val Ser Glu Cys
20 25

<210> 220
<211> 56
<212> PRT
<213> Homo sapiens

<400> 220
Met Phe Ala Ser Glu Phe Phe Phe Leu Val Ile Cys Leu Val Trp Asp
1 5 10 15

His Val Ala Phe Phe Ser Leu Thr Arg Val Ile Lys Val His Thr Val
20 25 30

Lys Ser Met Arg Ser Lys Ala Leu Arg Arg Arg Leu Leu Ser Val Asn
35 40 45

Val Met Ala Gly Ala Ile Arg Leu
50 55

<210> 221
<211> 97
<212> PRT
<213> Homo sapiens

<400> 221
Arg Ala Arg Ala Glu Ala Ala Arg Ala Arg Gly Glu Val Cys Phe His
1 5 10 15

Cys Arg Lys Pro Gly His Gly Ile Ala Asp Cys Pro Ala Ala Leu Glu
20 25 30

Asn Gln Asp Met Gly Thr Gly Ile Cys Tyr Arg Cys Gly Ser Thr Glu
35 40 45

His Glu Ile Thr Lys Cys Lys Ala Lys Val Asp Pro Ala Leu Gly Glu
50 55 60

Phe Pro Phe Ala Lys Cys Phe Val Cys Gly Glu Met Gly His Leu Ser
65 70 75 80

```
Arg Ser Cys Pro Asp Asn Pro Lys Gly Leu Tyr Ala Asp Gly Lys Tyr
                85                  90                  95

Cys



<210> 222
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (30)

<220>
<221> UNSURE
<222> (33)

<400> 222
Met Ser Glu Ala Ser Leu Ser Leu Lys Glu Gln Lys Phe Cys His Pro
  1               5                  10                  15

Val Val Leu Tyr Asn Leu Glu Asn Pro Leu Asn Leu Thr Xaa Leu Gln
             20                  25                  30

Xaa Tyr Leu Leu
         35


<210> 223
<211> 65
<212> PRT
<213> Homo sapiens

<400> 223
Met Leu Cys Gly Val Leu Cys Trp Gly Trp Gly Cys Gln Asp Glu Lys
  1               5                  10                  15

Gln Pro Cys Gly Cys Ala Leu Gly Phe Thr Ser Gln Thr Ser Val Ala
             20                  25                  30

Phe Ala Arg Arg Lys Asp Ser Gln Gly Leu His Ile Cys Cys Pro Gln
         35                  40                  45

Phe Cys Pro Phe Ser Asn Lys Ser His Thr Ser Asn Leu Leu Val Ala
     50                  55                  60

                            100
```

His
65

<210> 224
<211> 804
<212> PRT
<213> Homo sapiens

<400> 224
Ala Lys Pro Leu Thr Asp Gln Glu Lys Arg Arg Gln Ile Ser Ile Arg
1 5 10 15

Gly Ile Val Gly Val Glu Asn Val Ala Glu Leu Lys Lys Ser Phe Asn
20 25 30

Arg His Leu His Phe Thr Leu Val Lys Asp Arg Asn Val Ala Thr Thr
35 40 45

Arg Asp Tyr Tyr Phe Ala Leu Ala His Thr Val Arg Asp His Leu Val
50 55 60

Gly Arg Trp Ile Arg Thr Gln Gln His Tyr Tyr Asp Lys Cys Pro Lys
65 70 75 80

Arg Val Tyr Tyr Leu Ser Leu Glu Phe Tyr Met Gly Arg Thr Leu Gln
85 90 95

Asn Thr Met Ile Asn Leu Gly Leu Gln Asn Ala Cys Asp Glu Ala Ile
100 105 110

Tyr Gln Leu Gly Leu Asp Ile Glu Glu Leu Glu Glu Ile Glu Glu Asp
115 120 125

Ala Gly Leu Gly Asn Gly Gly Leu Gly Arg Leu Ala Ala Cys Phe Leu
130 135 140

Asp Ser Met Ala Thr Leu Gly Leu Ala Ala Tyr Gly Tyr Gly Ile Arg
145 150 155 160

Tyr Glu Tyr Gly Ile Phe Asn Gln Lys Ile Arg Asp Gly Trp Gln Val
165 170 175

Glu Glu Ala Asp Asp Trp Leu Arg Tyr Gly Asn Pro Trp Glu Lys Ser
180 185 190

Arg Pro Glu Phe Met Leu Pro Val His Phe Tyr Gly Lys Val Glu His

```
        195                 200                 205

Thr Asn Thr Gly Thr Lys Trp Ile Asp Thr Gln Val Val Leu Ala Leu
    210                 215                 220

Pro Tyr Asp Thr Pro Val Pro Gly Tyr Met Asn Asn Thr Val Asn Thr
225                 230                 235                 240

Met Arg Leu Trp Ser Ala Arg Ala Pro Asn Asp Phe Asn Leu Arg Asp
                245                 250                 255

Phe Asn Val Gly Asp Tyr Ile Gln Ala Val Leu Asp Arg Asn Leu Ala
            260                 265                 270

Glu Asn Ile Ser Arg Val Leu Tyr Pro Asn Asp Asn Val Ala Ile Gln
        275                 280                 285

Leu Asn Asp Thr His Pro Ala Leu Ala Ile Pro Glu Leu Met Arg Ile
    290                 295                 300

Phe Val Asp Ile Glu Lys Leu Pro Trp Ser Lys Ala Trp Glu Leu Thr
305                 310                 315                 320

Gln Lys Thr Phe Ala Tyr Thr Asn His Thr Val Leu Pro Glu Ala Leu
                325                 330                 335

Glu Arg Trp Pro Val Asp Leu Val Glu Lys Leu Leu Pro Arg His Leu
            340                 345                 350

Glu Ile Ile Tyr Glu Ile Asn Gln Lys His Leu Asp Arg Ile Val Ala
        355                 360                 365

Leu Phe Pro Lys Asp Val Asp Arg Leu Arg Arg Met Ser Leu Ile Glu
    370                 375                 380

Glu Glu Gly Ser Lys Arg Ile Asn Met Ala His Leu Cys Ile Val Gly
385                 390                 395                 400

Ser His Ala Val Asn Gly Val Ala Lys Ile His Ser Asp Ile Val Lys
                405                 410                 415

Thr Lys Val Phe Lys Asp Phe Ser Glu Leu Glu Pro Asp Lys Phe Gln
            420                 425                 430

Asn Lys Thr Asn Gly Ile Thr Pro Arg Arg Trp Leu Leu Leu Cys Asn
        435                 440                 445

Pro Gly Leu Ala Glu Leu Ile Ala Glu Lys Ile Gly Glu Asp Tyr Val
```

```
    450                 455                 460

Lys Asp Leu Ser Gln Leu Thr Lys Leu His Ser Phe Leu Gly Asp Asp
465                 470                 475                 480

Val Phe Leu Arg Glu Leu Ala Lys Val Lys Gln Glu Asn Lys Leu Lys
                485                 490                 495

Phe Ser Gln Phe Leu Glu Thr Glu Tyr Lys Val Lys Ile Asn Pro Ser
            500                 505                 510

Ser Met Phe Asp Val Gln Val Lys Arg Ile His Glu Tyr Lys Arg Gln
        515                 520                 525

Leu Leu Asn Cys Leu His Val Ile Thr Met Tyr Asn Arg Ile Lys Lys
    530                 535                 540

Asp Pro Lys Lys Leu Phe Val Pro Arg Thr Val Ile Ile Gly Gly Lys
545                 550                 555                 560

Ala Ala Pro Gly Tyr His Met Ala Lys Met Ile Ile Lys Leu Ile Thr
                565                 570                 575

Ser Val Ala Asp Val Val Asn Asn Asp Pro Met Val Gly Ser Lys Leu
            580                 585                 590

Lys Val Ile Phe Leu Glu Asn Tyr Arg Val Ser Leu Ala Glu Lys Val
        595                 600                 605

Ile Pro Ala Thr Asp Leu Ser Glu Gln Ile Ser Thr Ala Gly Thr Glu
    610                 615                 620

Ala Ser Gly Thr Gly Asn Met Lys Phe Met Leu Asn Gly Ala Leu Thr
625                 630                 635                 640

Ile Gly Thr Met Asp Gly Ala Asn Val Glu Met Ala Glu Glu Ala Gly
                645                 650                 655

Glu Glu Asn Leu Phe Ile Phe Gly Met Arg Ile Asp Asp Val Ala Ala
            660                 665                 670

Leu Asp Lys Lys Gly Tyr Glu Ala Lys Glu Tyr Tyr Glu Ala Leu Pro
        675                 680                 685

Glu Leu Lys Leu Val Ile Asp Gln Ile Asp Asn Gly Phe Phe Ser Pro
    690                 695                 700

Lys Gln Pro Asp Leu Phe Lys Asp Ile Ile Asn Met Leu Phe Tyr His
```

```
705                 710                 715                 720

Asp Arg Phe Lys Val Phe Ala Asp Tyr Glu Ala Tyr Val Lys Cys Gln
                725                 730                 735

Asp Lys Val Ser Gln Leu Tyr Met Asn Pro Lys Ala Trp Asn Thr Met
            740                 745                 750

Val Leu Lys Asn Ile Ala Ala Ser Gly Lys Phe Ser Ser Asp Arg Thr
        755                 760                 765

Ile Lys Glu Tyr Ala Gln Asn Ile Trp Asn Val Glu Pro Ser Asp Leu
    770                 775                 780

Lys Ile Ser Leu Ser Asn Glu Ser Asn Lys Val Asn Gly Asn Asn Lys
785                 790                 795                 800

Val Asn Gly Asn
```

```
<210> 225
<211> 60
<212> PRT
<213> Homo sapiens

<400> 225
Met Gly Asp Leu Tyr Lys Lys Glu Leu Lys Lys Arg Arg Asn Val Ile
  1               5                  10                  15

Ser Met Leu Leu Gln Val Lys Gly Lys Gln Glu Asp Lys Tyr His Lys
             20                  25                  30

Lys Thr Lys Met Tyr Leu Thr Phe Trp Asp Lys Ile Val Gly Ser Thr
         35                  40                  45

Glu Asn Trp Asn Leu Glu Leu Pro Val Pro Gln Arg
     50                  55                  60
```

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<210> 226
<211> 46
<212> PRT
<213> Homo sapiens

<400> 226
Met Phe Tyr Glu Tyr Lys Glu Tyr Asn Glu Cys Tyr Tyr Lys Tyr Ile
  1               5                  10                  15
```

His Ala Asn Arg Asp Phe Gln Tyr Pro Thr Phe Ser Gln Phe Arg Leu
20 25 30

Pro Glu Ile Gly Leu Leu Gly Gln Arg Leu Gln Thr Tyr Phe
35 40 45

<210> 227
<211> 13
<212> PRT
<213> Homo sapiens

<400> 227
Met Arg Arg Trp Tyr Ile Trp Glu Val Ser Arg Gly Tyr
1 5 10

<210> 228
<211> 27
<212> PRT
<213> Homo sapiens

<400> 228
Met Phe Leu Arg Tyr Leu Gly Lys Ser Ser Glu Pro Cys Val Ala Asn
1 5 10 15

Gly Asn Ala Val Val Gln Trp Gly Leu Leu Gly
20 25

<210> 229
<211> 45
<212> PRT
<213> Homo sapiens

<400> 229
Met Ala Thr Asn Ser Cys Leu Tyr Ser Thr His Lys Gln Phe Gln Tyr
1 5 10 15

Met Phe Cys Asp Arg Ser Pro Lys Ile Ser Ser Phe Met Val Pro Gly
20 25 30

Arg Thr Glu Asn Ser Arg Met Gln Leu Leu Lys Leu Phe
35 40 45

<210> 230

<211> 96
<212> PRT
<213> Homo sapiens

<400> 230
Lys Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu Tyr Asn Asp Val
1 5 10 15

Ile Ile Ala His Arg Asn Phe Glu Leu Pro Gly Ser Ser Asn Pro Ser
20 25 30

Ala Ser Ala Ser Gln Glu Leu Gly Leu Gln Thr Cys Ala Thr Thr Ser
35 40 45

Ser Phe Phe Ile Phe Cys Arg Gly Arg Val Ser Leu Cys Cys Pro Gly
50 55 60

Gly Val Ser His Ser Thr Ser Ser Asn Pro Thr Ala Ser Ala Ser Gln
65 70 75 80

Arg Ala Arg Ile Thr Gly Leu Ser His Cys Thr Gln Pro Lys Ala Leu
85 90 95

<210> 231
<211> 56
<212> PRT
<213> Homo sapiens

<400> 231
Met Leu Ala Leu Ser His Trp Thr Val Val Pro Ser His Pro Leu Ser
1 5 10 15

Pro Ser Leu Asp His Glu His Ser Arg Ala Arg Thr Thr Ser Val Leu
20 25 30

Phe Thr Ala Val His Pro Ala Leu Thr Gln Cys Leu Met His Ala Leu
35 40 45

Gly Ala Gln Glu Val Leu Ile Gln
50 55

<210> 232
<211> 34

<212> PRT
<213> Homo sapiens

<400> 232
Met Asp Ser Pro Lys Arg Val Ser Ser Asp Leu Ser Leu Leu Arg Asn
1 5 10 15

Lys Ile Leu Asp Ser Gly Cys Val Cys Phe Arg Cys Cys Gly Thr Gly
20 25 30

Trp Phe

<210> 233
<211> 34
<212> PRT
<213> Homo sapiens

<400> 233
Met Leu Ser Ala Phe Phe Thr Leu Ile Leu Ser Pro Val Tyr Arg Arg
1 5 10 15

Val Phe Gln Arg Leu His Met Arg Tyr Leu Asn Lys Leu Lys Ala Glu
20 25 30

Glu Ile

<210> 234
<211> 35
<212> PRT
<213> Homo sapiens

<400> 234
Met Cys Phe Glu Thr Gly Glu Tyr Ser Trp Ser Gly Ala Gly Ala Gln
1 5 10 15

Asn Thr Arg Phe Leu Cys Ser Asp Asn Leu Cys Ser Leu Ala Leu Leu
20 25 30

Leu Ile Tyr
35

<210> 235
<211> 40

<212> PRT
<213> Homo sapiens

<400> 235
Met Ile Asn Glu Gln Met Asn Ile Ser Glu Lys Leu Val Tyr Ile Ile
1 5 10 15

Met Asn Arg Leu Val Leu His Phe Tyr Lys Asn Arg Lys Leu Lys Ile
20 25 30

Lys Lys Lys Ile Leu Pro Lys Lys
35 40

<210> 236
<211> 60
<212> PRT
<213> Homo sapiens

<400> 236
Met Tyr Lys Cys Leu Leu Glu Ala His Glu Val Tyr Arg Trp Phe Leu
1 5 10 15

Pro Gln Tyr Leu Thr Ile Val Lys Phe Gln Ala Met Pro Leu Leu Ser
20 25 30

Thr Thr Phe Ser Leu Arg Ser Thr Gly Ile Trp Leu Arg Phe His Ser
35 40 45

Asp Asp Leu Leu Ser Glu Thr Leu Arg Leu Glu Lys
50 55 60

<210> 237
<211> 36
<212> PRT
<213> Homo sapiens

<400> 237
Met Ser Leu Tyr Leu Phe Ser Pro Phe His Cys Pro Phe Phe Phe Pro
1 5 10 15

His Leu Pro Leu Cys Ser Val Leu Ser Leu Ala Ser Ser Cys Gln Tyr
20 25 30

Val Asp Phe Cys
35

<210> 238
<211> 66
<212> PRT
<213> Homo sapiens

<400> 238
Met Phe Phe Tyr Leu Ser Lys Thr Leu Pro Met Phe Leu Leu Lys His
1 5 10 15

His Ser Tyr Ser Lys Thr Lys Val Asn Glu Asn Leu Tyr Gln Asp Asp
20 25 30

Cys Pro Gln Ser Ser Gly Trp Thr Thr Cys Leu Ser Ser Ile Ile Leu
35 40 45

Cys Ile Ile Ser Leu Ile His Ser Asn Ser Leu Cys Ile Ile Cys Ala
50 55 60

Ser Gly
65

<210> 239
<211> 31
<212> PRT
<213> Homo sapiens

<400> 239
Met Cys His Gly Phe Val Thr Pro Tyr Tyr Tyr Tyr Leu Ser Leu Ala
1 5 10 15

Ser Cys Tyr Cys Pro Tyr Leu Thr Thr Ile Thr Ser Met Ser Ser
20 25 30

<210> 240
<211> 44
<212> PRT
<213> Homo sapiens

<400> 240
Met Asn Asn Ile Ile Pro Leu Leu Ile Leu Met Gly Leu Phe Phe Leu
1 5 10 15

Ser Gln Ser Ala Leu Ile His Ile Gly Ser Leu Asn Ser Ser Asn Ile
20 25 30

Ile Lys Ser Phe Ser Pro Arg Asp Pro Thr Phe Arg
35 40